

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



Reserve
aTD194
.56
.072W54
1985

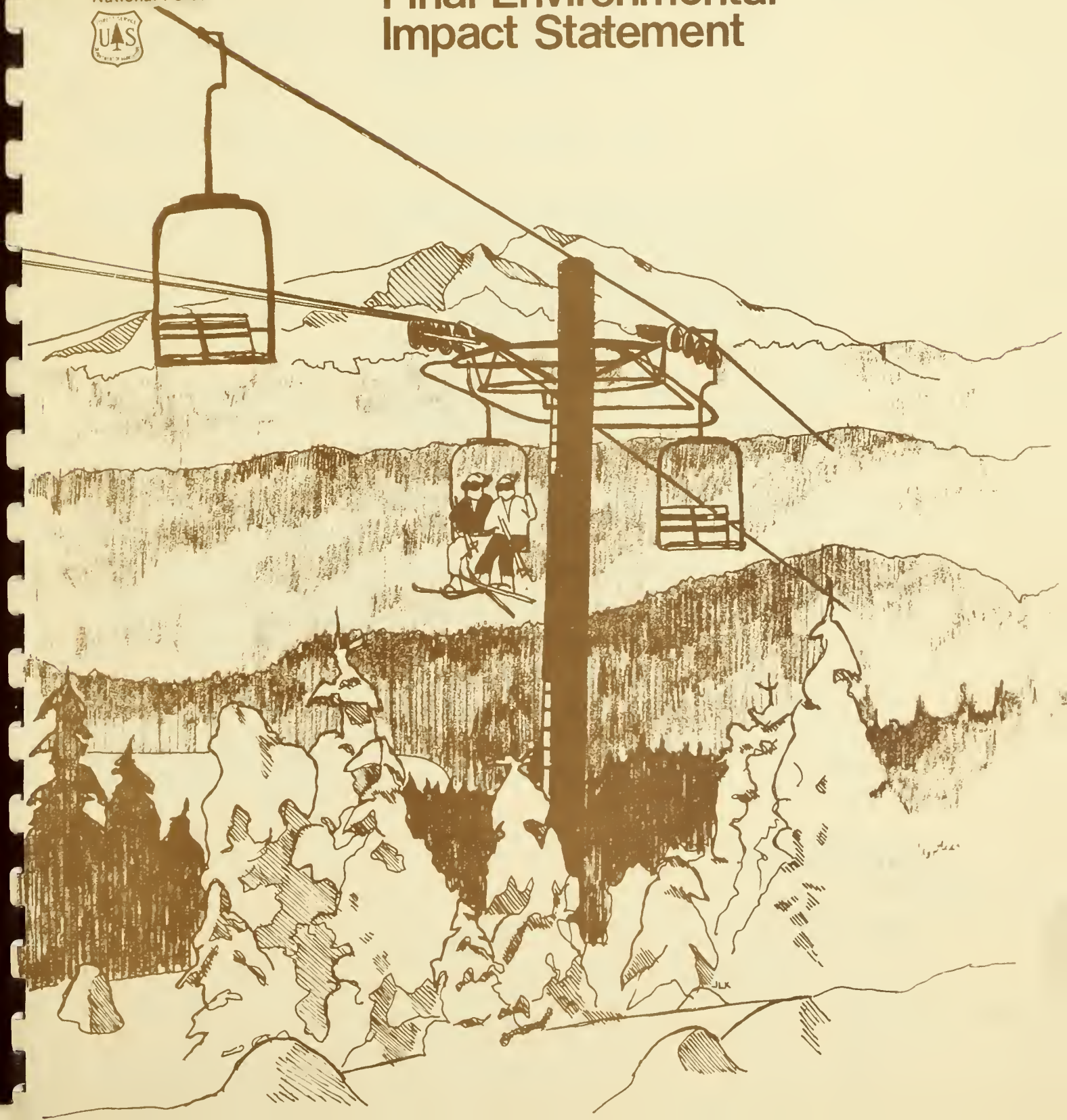
tes
it of
vice

e
National Forest
Deschutes
National Forest



Willamette Pass Alpine Winter Sports Site

Final Environmental Impact Statement



DISCARDED
PSW LIBRARY

United States
Department of
Agriculture



National Agricultural Library

DISCARDED

FINAL ENVIRONMENTAL IMPACT STATEMENT

WILLAMETTE PASS ALPINE WINTER SPORTS SITE
Willamette and Deschutes National Forests
Lane and Klamath Counties, Oregon

Lead Agency: U.S. Department of Agriculture--Forest Service

Cooperating Agencies: Oregon Department of Fish and Wildlife
Northwest Region
Route 5, Box 325, Corvallis, OR 97330

Responsible Official: Michael A. Kerrick, Forest Supervisor
Willamette National Forest

For Further Information Contact: Conny Frisch, Resource Assistant
Oakridge Ranger District
46375 Highway 58, Westfir, OR 97492
(503) 782-2291

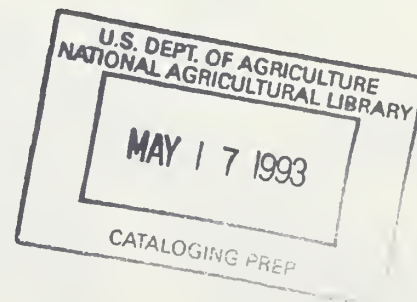
Location of Action: State of Oregon
Willamette Pass
Lane and Klamath Counties

Date of Transmission to EPA and Public: Draft, January 3, 1985

Abstract:

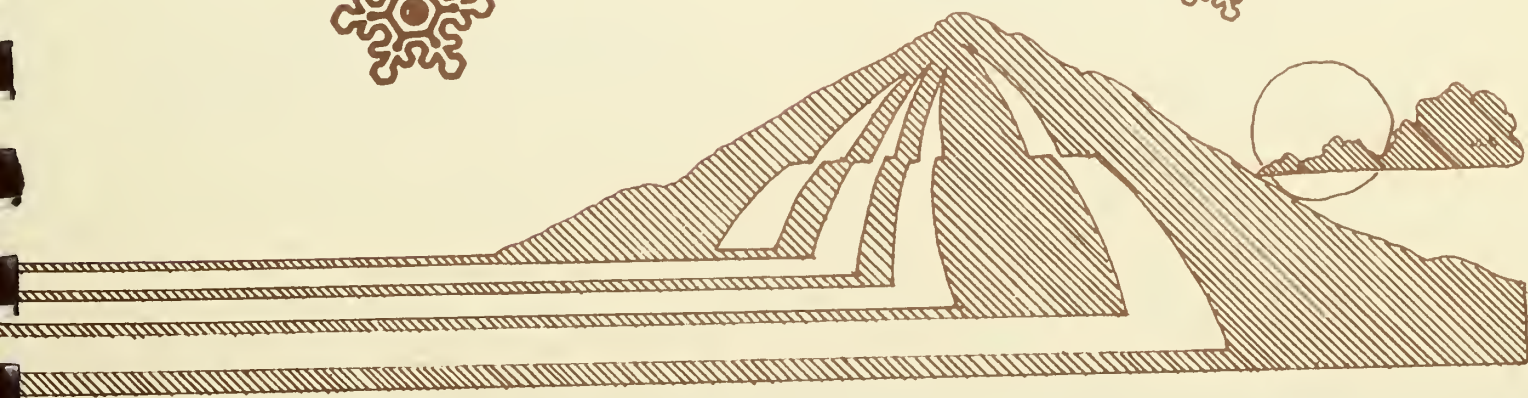
In March of 1983, the Willamette Pass Ski Corporation submitted a Master Plan which proposed expansion of the area and development of additional facilities to cover ten (up to fifteen) years from 1985-2000. In response, the Forest Service conducted an environmental analysis to document the design of alternatives and the analysis of the environmental consequences of each alternative through the environmental impact statement process of which this Final Environmental Impact Statement (FEIS) is a part.

Six alternative levels of development are presented and analyzed; 3135 skiers at one time (SAOT), 3284 SAOT, 3994 SAOT (Preferred Alternative), 4513 (Willamette Pass Proposal), 5690 SAOT, and a "No action" alternative continuing the current management activities at Willamette Pass, 1851 SAOT. This statement meets the requirements of the National Environmental Policy Act (NEPA).



Handwritten notes in the bottom left corner, possibly a signature or date.

Summary





SUMMARY

A. PURPOSE AND NEED

In March of 1983, the Willamette Pass Ski Corporation submitted a Master Plan which proposed expansion of the area and development of additional facilities to cover ten (up to fifteen) years from 1985-2000. In response, the Forest Service conducted an environmental analysis to document the design of alternatives and the analysis of the environmental consequences of each alternative through the environmental impact statement process of which this Final Environmental Impact Statement (FEIS) is a part.

The alternatives are consistent with implementation direction established in the Willamette National Forest Multiple Use Land Management Timber Management, FEIS, 1978 and Deschutes National Forest Land Management Plan, FEIS, 1978.

Physical, biological, social and economic consequences of expanding the Willamette Pass Ski Area on the Deschutes and Willamette National Forests are addressed. The project study area lies about 70 miles southeast of Eugene on State Highway 58 (see Maps 1 and 2). The study area encompasses approximately 1,100 acres of National Forest land ranging in altitude from 5,120 to 6,700 feet. The surrounding area is characterized by relatively gentle topography, numerous pothole lakes and meadows, streams, and high peaks over 6,500 feet.

The intent of this analysis is to:

- Review and respond to the permittee's proposal for expansion of the area and addition of facilities.

- Examine existing and future recreational needs in the Eugene, Springfield, Oakridge, and Crescent areas.
- Display and compare the physical, biological, social, and economic environmental consequences of the proposal, alternatives to the proposal, and possible mitigative measures for public review and comment.
- Respond to issues raised by the public, organizations and other agencies.

B. MAJOR ISSUES TO BE RESOLVED

Listed below are the significant public issues identified as a result of public meetings, field trips, letters and phone conversations. These issues are addressed in this FEIS.

1. What effect might the project have on existing wildlife habitat? What species might be affected?
2. What effect might the project have on soil and water resources? What might be the effect on the Gold Lake Bog? Skyline Creek?
3. What effect might expansion have on the vegetation? What species would be affected? What is its commercial value?
4. How might the expansion proposal affect the integrity of adjacent undeveloped areas?
5. How might the expansion affect cross-country skiers, hikers, backpackers, and others who currently use the area?
6. What effect might the expansion have on the Pacific Crest National Scenic Trail?

7. What are the existing and future public demands for more winter sports development?
8. How might the expansion affect the quality and diversity of ski facilities at Willamette Pass?
9. How might the expansion proposal ensure better skiing conditions?
10. What provisions does the expansion have for nordic facilities such as groomed cross-country trails?
11. What effect will the expansion proposal have on overnight accommodations for skiers in the area?
12. How might the expansion affect the visual quality of the area as seen from Waldo, Gold and Odell Lakes? The Pacific Crest National Scenic Trail?
13. What effect might expansion have on the visual quality as seen from Maiden Peak, Mt. Fuji, and Mt. Ray?
14. What might be the economic effects on area residents? On local communities? On other Forest Service permittees?
15. Is the proposed expansion economically feasible?
16. What effect might the expansion have in the Eugene/Springfield area?
17. What effect might the expansion have on economic diversification in the Eugene/Springfield area? Lane County?
18. What effect might the expansion have on returns to the U.S. Treasury?

19. Will there be additional public involvement?

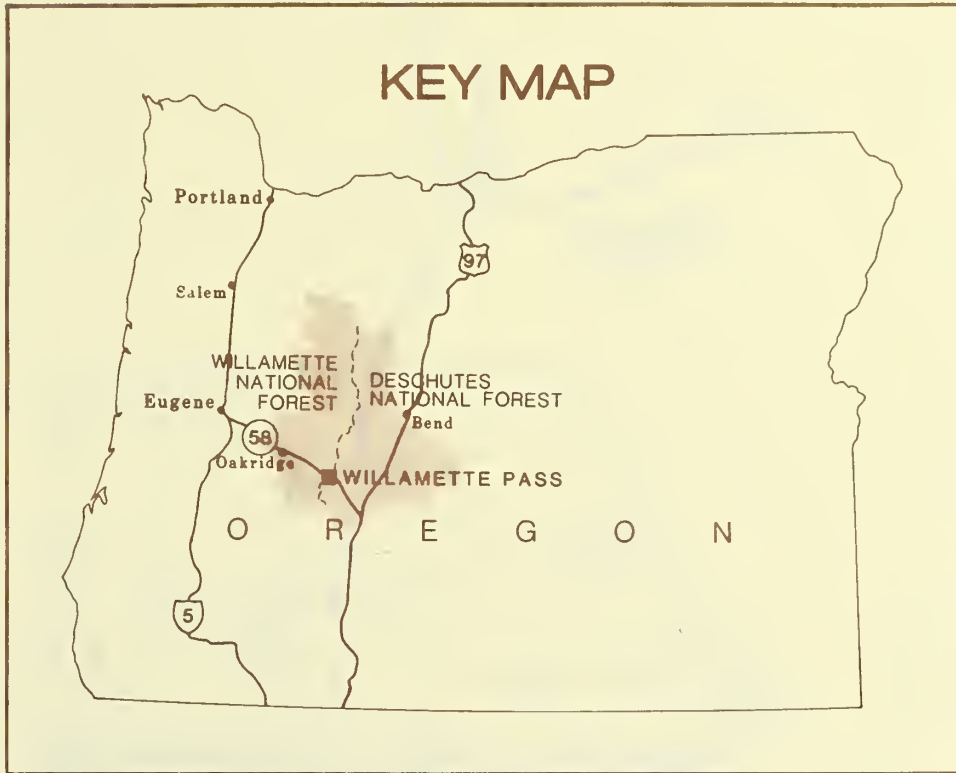
C. ALTERNATIVES CONSIDERED

Six alternatives, including the Willamette Pass Ski Corporation proposal, were analyzed. The alternatives range from the existing situation (no action), to low, moderate and high levels of development for alpine and nordic skiing. They vary in the amount of skiing opportunities available and the amount of area involved as described below and in Table II-1

Alternative I: No change in present management under existing Special Use Permit. Management of existing and proposed facilities would remain the same as approved for Phase I Development for 1,851 skiers at one time. Permit area is roughly 400 acres.

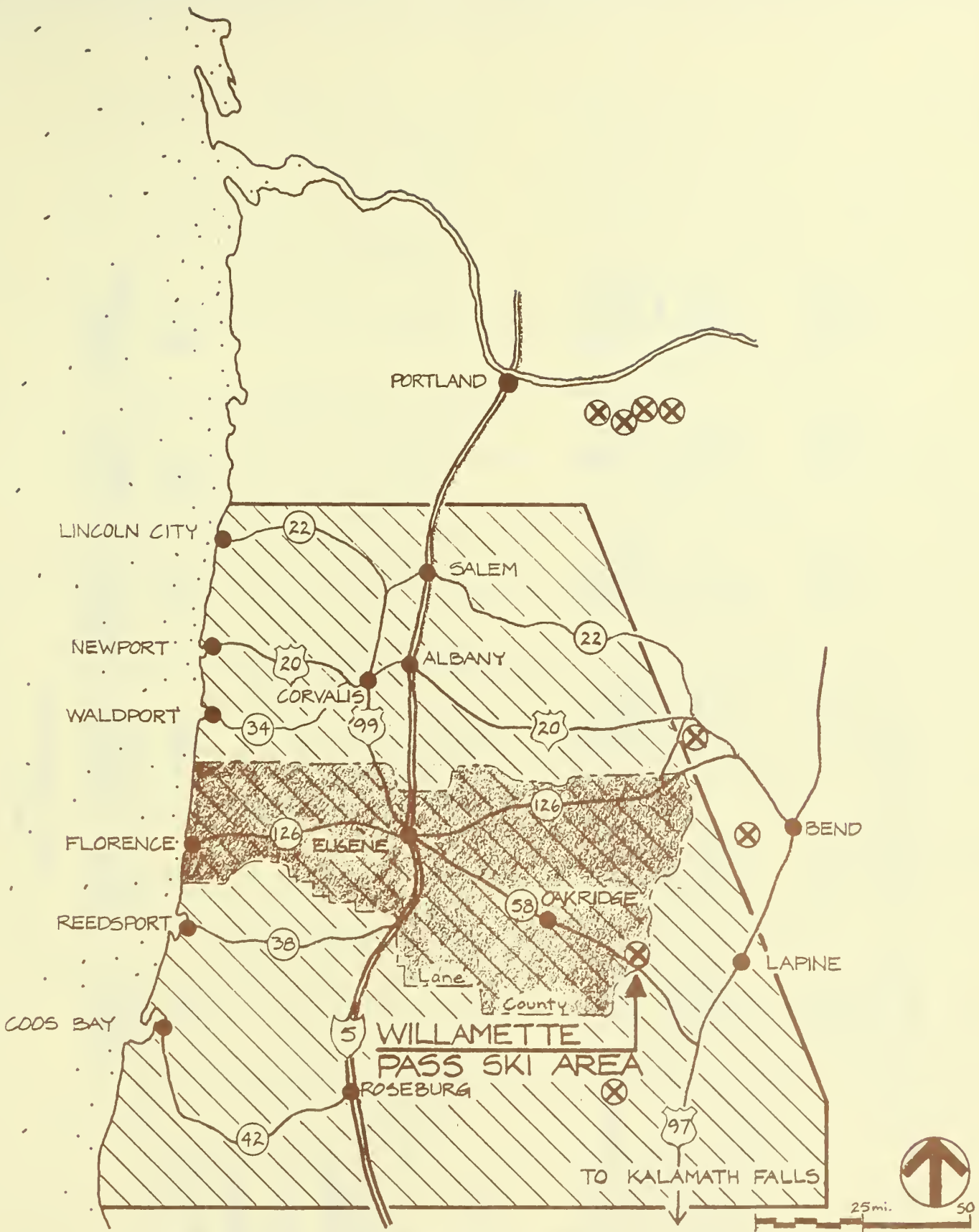
Alternative II: Issue a Special Use Permit which allows development of the south side of Eagle Peak accommodating 3,135 skiers at one time. Permit area is roughly 400 acres.

Alternative III: Issue a Special Use Permit which allows development of one lift on the north slope of Eagle Peak accommodating 3,284 skiers at one time. Permit area is 525 acres.



Project Location





	OREGON STATE HIGHWAY		PRINCIPLE MARKET AREA
	U.S. HIGHWAY		SKI AREAS
	INTERSTATE HIGHWAY	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <h2>LEGEND</h2> </div>	
---	COUNTY LINE		



Table II-1

SUMMARY OF ALTERNATIVES

ALTERNATIVE	ALTERNATIVE I NO ACTION PHASE I	ALTERNATIVE II SOUTHSIDE ONLY	ALTERNATIVE III ONE NORTHSIDE LIFT	(Preferred Alter.) ALTERNATIVE IV TWO NORTHSIDE LIFTS	ALTERNATIVE V WILL. PASS PROPOSAL	ALTERNATIVE VI MAXIMUM DEVELOPMENT
CAPACITY						
People at one time (PAOT)	2177	3688	3863	4500	4500	6694
Skiers at one time (SAOT)	1851	3135	3284	3994	4513	5690
OVERNIGHT ACCOMMODATIONS						
Hotel (30 Units)						X
Employee Housing (15 units)	X	X	X	X	X	X
RV Sites (30 Units)						
RECREATION OPPORTUNITIES						
Recreation Facilities						
Day Lodge, Parking Overpass, Ski Patrol Building	X	X	X	X	X	X
Summit Lodge				X	X	X
Hordic Center		X	X	X	X	X
Ski Lifts						
Existing (A,B,C)	X	X	X	X	X	X
D			X	X	X	X
E			X	X	X	X
F				X	X	X
G				X	X	X
H		X		X		X
Ski Runs						
On North Facing Slope	0	0	25	54	78	78
At Greater 5500 Foot Elevation	77 acres	77 acres	120 acres	149 acres	160 acres	170 acres
Total	110 acres	110 acres	146 acres	209 acres	217 acres	237 acres
Groomed Cross-Country		2.5 miles	2.5 miles	5 miles	5 miles	5 miles
Pacific Crest Nat'l Scenic Tr.	No Change	No Change	Relocate	Relocate	Relocate	No Change
- Parking required	627 cars	1037 cars	1086 cars	1266 cars	1266 cars	1883 cars
(Veh. stored on site)	7 buses	12 buses	13 buses	15 buses	15 buses	22 buses
Sewage and Water (People At One Time)	2177	3688	3863	4500	4500	6694
LAND USES						
Internal Roads	2.75 miles	2.75 miles	3.0 miles	6.50 miles	6.50 miles	6.50 miles
Parking lots	9 acres	11 acres	13 acres	14.3 acres	14.3 acres	18.3 acres
Total Permit Area	400 acres	400 acres	525 acres	1100 acres	1100 acres	1100 acres

The X indicates that facilities are present under a specific alternative.

Alternative IV: Issue a Special Use Permit which allows development of one lift on the north slope of Eagle Peak and two lifts on the north and south slopes of West Peaks to accommodate 3,994 skiers at one time and a Summit Lodge serving 426 skiers at one time. Permit area is 1100 acres.

Alternative V: Issue a Special Use Permit which allows development of three lifts on the north slopes of Eagle and West Peaks to accommodate 4,513 skiers at one time; Summit Lodge serving 426 skiers at one time; and overnight accommodations in the south parking lot containing 30 units. Permit area is 1100 acres.

Alternative VI: Issue a Special Use Permit which allows maximum development of Willamette Pass Ski Area by adding three lifts on the north slopes and 2 lifts on the south slopes of Eagle and West Peaks to accommodate 5690 skiers at one time; a Summit Lodge serving 426 skiers at one time; and overnight accommodations in Sleepy Hollow containing 30 units. Permit area is 1100 acres.

D. ENVIRONMENTAL CONSEQUENCES

AIR QUALITY

The alternatives proposed would have a negligible effect on air quality. Construction work would result in a temporary increase in particulate matter (PM). Proposed mitigation will prevent degradation below established air quality standards.

Increased traffic under the alternatives would result in some corresponding increases in carbon monoxide (CO) concentrations. The expected increases in CO and PM content would be undetectable and insignificant for all alternatives due to the excellent horizontal dispersal and vertical mixing of CO and PM emissions.

SOILS

Ski area development will result in some erosion loss and subsequent loss of soil productivity. Removal of natural vegetation due to ski lift run construction will result in a short-term loss of protective soil cover and increased soil erosion. Construction of buildings, parking lots, roads and relocation of the Pacific Crest Trail would result in an additional long-term loss of natural soil areas. Potential for short and long-term soil erosion and productivity impacts will be reduced by identified mitigation measures.

WATER

1. Erosion, Runoff and Groundwater Supply

On-site, a minor increase in runoff for all alternatives would be expected. Off-site impacts include 1) minor increase in surface runoff to Sleepy Hollow Creek and 2) slight reduction in groundwater supply.

The direct effects on Skyline Creek, Sleepy Hollow Creek and wetlands northeast of the study area would be low because most soil material would be transported and deposited on site. An adequate supply of groundwater exists for domestic use for all alternatives.

2. Sewage Disposal

Plans for waste water sewage disposal at the base area have been submitted to and approved by the Oregon Department of Environmental Quality. The permittee monitors the effectiveness of the waste treatment system as required by DEQ. No change in water quality is expected.

Sewage disposal for the Summit Lodge will be addressed in a separate environmental analysis.

3. Diesel Spills

The potential for fuel spills and/or leaks exists during the transporting, refueling and storing of fuel.

If diesel enters the groundwater system, wetlands or Skyline Creek north of the study area, it could affect the water quality of a large area.

The permittee will be required to maintain water quality on National Forest lands. Proposed mitigation measures will greatly reduce or eliminate the potential for degradation of water quality in and around the permit area for all alternatives.

WILDLIFE

1. Deer and Elk

All proposed alternatives, except I, should have the effect of improving forage production for deer and elk. Short-term displacement of deer and elk would occur during lift construction and normal maintenance periods for Alternatives III-VI.

The building of the Summit Lodge and lift E would decrease use of travel corridors by big game.

2. Wolverine

No change in wolverine habitat will occur in Alternatives I and II. For alternatives III-VI, reduced use by wolverines in the immediate vicinity of the expansion is anticipated since the effected area encompasses roughly 1 1/2 square miles, the overall impact on an animal with a 60 square mile winter territory is expected to be minimal. Wolverines use of the Gold Lake area should not be affected. Impacts are more likely at Douglas Horse Pasture due to the noise from lifts and grooming machinery.

3. Fisher

No change in habitat under Alternatives I and II. If fisher currently breed in the proposed expansion area, there is a potential for disruption or displacement of the animal, for alternatives III-VI. Based on the size of yearly home ranges of 1500 ha, the likelihood of disturbance to more than one breeding fisher is probably low.

4. Marten

No change in habitat under Alternatives I and II. There would probably be some winter displacement from the immediate activity area. It is expected that foraging by marten in openings for ski runs will probably continue after expansion. Overall, it appears the marten probably is compatible with the expansion.

5. Fisheries

Effects on fisheries resource are described in the section on water.

Mitigation measures will reduce but not eliminate impacts to deer, elk, wolverines, fisher, marten and fish.

RECREATION

Recreational opportunities considered in the alternatives will affect the total recreation situation in the Willamette Pass area. Addition of more ski terrain and facilities will be considered beneficial to the recreational experience by some users. Others who prefer the existing solitude and natural character of these areas will find the effects adverse. Both of these are long-term effects.

Skiing opportunities would increase with each successive level of development beyond Alternative I. Alternatives III-VI would provide for more consistent and higher quality skiing as well as an extended length of season.

Alternatives I and II, as defined by the Recreation Opportunity Spectrum (ROS), would retain the primitive and semi-primitive dispersed recreation opportunities on the north slopes.

Alternatives III through VI would transform primitive and semi-primitive dispersed recreation opportunities to the roaded natural ROS class. These changes would be permanent or irreversible. Since the large undeveloped area north of the study area would remain unchanged, it is expected that expansion of the ski area would have minimal effects on the semi-primitive and primitive dispersed recreation activities in the area.

Expansion alternatives (II-VII) allow for continued winter and summer use of existing trails. Relocation of Pacific Crest Trail (PCNST) (alternatives III-V) would improve scenic quality and skiability. A minor change in user experience may occur. Relocation of the PCNST would add three miles of winter trail to the existing cross-country trail. Alternative VI would create a decrease in scenic quality on the PCNST.

Presence of ski area facilities in previously undeveloped areas (alternatives III-VI) may have a negative effect on the recreation experience of hikers and backpackers traveling through the area.

VISUAL RESOURCES

Computer graphics were used to analyze the potential effects of ski area development on visual resources at six selected viewing areas. Effects are summarized as follows:

<u>Viewpoint</u>	<u>Effect on Visual Resource</u>
Odell Lake from Trapper Creek Campground	Existing runs associated with lift A are visible. H lift line would be visible D, E, F and G lifts and runs would not be visible.

Gold Lake from Middle of Lake The upper one third to one half of F lift line and ski runs would be visible. D, E, G and H lifts and runs not visible.

Waldo Lake from North End of Lake D, E, F, G and H ski trails and lift lines would not be visible.

Waldo Lake from Rhododendron Island No effect

Maiden Peak from Summit D and E lift lines and ski runs would be visible; F, G and H would not.

Mt. Ray from Summit F lift line and associated ski runs would be visible; D, E, G and H would not.

Mt. Fuji from Summit F lift line and associated ski runs would be visible; D, E, G and H would not.

LOCAL COMMUNITIES

Expansion would further economic diversification in local communities by encouraging additional recreation development in surrounding forest lands.

Growth in skiing leads to reinforcement of seasonal fluctuations in employment. Seasonally employed persons at Willamette Pass Ski Area ranges from 103 (Alternative I) to 318 (Alternative VI). Businesses in the area will continue to have cyclic seasonal fluctuations in profits and jobs

available. Consequently; no significant changes in population or impacts on community services are anticipated.

ECONOMICS

1. Secondary Revenue

Most sectors of the economy affected by the Willamette Pass Ski Area operation and potential expansion occur in Lane or adjacent counties. Based on studies from other construction projects, it is assumed that for every dollar spent on skiing, three dollars would be spent in a different section of the economy in the local area. Annual estimated secondary revenue to the market area ranges from \$3.51 million (Alternative I) to \$6.54 million (Alternative VI). In addition, one-time estimated revenue (based on construction) ranges from \$5.48 million (Alternative I) to \$13.50 million (Alternative IV).

2. Return to U.S. Treasury

The annual return to the U.S. Government is based on a proportion of the Willamette Pass Ski Corporation sales and gross fixed assets. Assuming that sales would increase in proportion to skier capacity and that 2.5% of sales is an average return, the return to U.S. Treasury ranges from : (Annual Return) Alternative I - \$18,250 to Alternative VI - \$57,130. A one-time return based on timber sold to build ski runs and lifts ranges from: Alternative I - \$109,863 to Alternative VI - \$281,423.

3. Public Demand

Demand is defined as an individual's desire to participate in a certain activity and is

measurable. The "measured" demand is sometimes different than actual demand because it is based on the desire to participate rather than actual participation.

On a national as well as local level, ski sales and participation at ski swaps and shows indicate that interest in skiing is increasing. Two methods were used to calculate Lane County skier preferences for Bachelor, Hoodoo, or Willamette Pass Ski Areas. The demand projections provide a guideline to assess the public need or desire for more downhill skiing facilities in the Central Cascades. The projected demands for downhill skiing in the Willamette Pass Area over the next 15 years may be found in Appendix D.

4. Break-Even

A break-even analysis was prepared to examine the feasibility of the alternatives. The projected demand for skiing at Willamette Pass was compared to the economic break-even point for the various alternatives over the next 10 to 15 years. The comparison provides an estimate of the ski area's financial viability. The anticipated ability to break-even depends on which demand projections are used.

The comparison of projected skier visits (based on demand calculations) to skier visits needed to break-even is shown in the Environmental Consequences section. Based on this information, it is expected that all alternatives have the potential to break-even.

TABLE OF CONTENTS

	Page
COVER SHEET	i
SUMMARY	ii
LIST OF TABLES	xiii
LIST OF MAPS	xv
LIST OF FIGURES	xvi
 Chapter	
I. PURPOSE AND NEED	1
Nature and Purpose of the Action	1
Background of the Willamette Pass Alpine Winter Sports Site	1
Issues and Concerns to be Addressed	2
II. ALTERNATIVES	4
Approach to Alternative Formulation	4
Alternatives Considered and Eliminated from Detailed Study . .	4
Alternatives Considered	5
I No Change - Phase I Only	5
General Mitigation Measures	6
II South Side Only	7
III One North Side Lift	8
IV Two North Side Lifts (Preferred Alternative)	9
V Willamette Pass Proposal	12
VI Maximum Development	13
III. AFFECTED ENVIRONMENT	15
A Location	15
B Physical Environment	15
1 Climate	15

TABLE OF CONTENTS (Continued)

	Page
2 Air Quality	15
3 Precipitation and Temperature	15
4 Wind	15
5 Aspect and Exposure	16
6 Snowfall - Quantity and Quality	16
7 Avalanche Hazard	17
8 Minerals	17
9 Topography and Soils	17
10 Water Resources	18
11 Fire	18
C Biological Environment	18
1 Wildlife	18
2 Fisheries	20
3 Vegetation	20
4 Sensitive Plants	21
5 Gold Lake Bog Research Natural Area	21
D Social and Economic Environment	21
1 Current Resource Management	21
2 Recreation	22
a Summer use	22
b Winter recreation	23
c Recreation Opportunity Spectrum	24
3 Cultural Resources	25
4 Noise	26
5 Visual Resources	26
6 Transportation	27
7 Local Communities	27
IV. ENVIRONMENTAL CONSEQUENCES	28
A Effects on the Physical Environment	28
1 Air Quality	28
2 Avalanche Hazards	28
3 Soils	29
4 Water	32
a Erosion Runoff and Groundwater Supply	32
b Sewage Disposal	32
c Diesel Spills	33
5 Fire	35

TABLE OF CONTENTS (Continued)

	Page
B Effects on the Biological Environment	36
1 Wildlife	36
a Deer and Elk	36
b Wolverine	37
c Fisher	38
d Marten	39
e Threatened, Endangered and Sensitive Animals	39
2 Fisheries	41
3 Vegetation	41
4 Sensitive Plants	41
5 Gold Lake Bog Research Natural Area	41
C Effects on the Social Environment	41
1 Recreation	41
a Developed Recreation	42
b Dispersed Recreation	44
2 Cultural Resources	49
3 Noise	49
4 Visual Resource	50
5 Transportation	51
6 Local Communities	52
a Housing	52
b Community Services	52
c Economic Diversification	53
d Employment	53
e Overnight Accommodations	53
f Minorities and Civil Rights	55
D Effects on the Economic Environment	55
1 Secondary Revenue	55
2 Return to US Treasury	56
3 Effects on Mt. Bachelor and Hoodoo Ski Areas	57
4 Public Demand for Skiing at Willamette Pass	58
5 Break-even	60
6 General Effects on the Economy by Alternatives	61
V. LIST OF PREPARERS	64
VI. LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES OF THE STATEMENT ARE SENT	69

TABLE OF CONTENTS (Continued)

	Page
VII.BIBLIOGRAPHY	81
VIII. APPENDIXES	84
IX. INDEX	302

LIST OF TABLES

Table		Page
II-1	Summary of Alternatives	4a
II-2	Comparison of Issue Resolution by Alternative	4b
II-3	Comparison of Alternative IV (proposed action) and Modification IVB, IVC, and IVD	11a
IV-1	Potential Loss of Soil Productivity	29a
IV-2	General Effect of Development of Facilities on Soil Resource	29b
IV-3	Risk Analysis for Diesel Spills	34a
IV-4	Acres of Available Deer and Elk Forage	38a
IV-5	Risk Analysis for Loss of Habitat Utilization by Wolverines	38a
IV-6	Impact on Vegetation	41a
IV-7	Description of Existing and Proposed Facilities	42a
IV-8	Description of Existing and Proposed Ski Lifts and Runs . . .	42d
IV-9	Changes in Recreation Opportunity Spectrum	44a
IV-10	Effects of Maximum Ski Area Development on Visual Resources as Seen From Six Selected Viewing Areas	50a
IV-11	Vehicles Stored on Site	51a
IV-12	Number of Seasonally Employed Persons at Willamette Pass Ski Area	53a
IV-13	Dollars Added to Primary Market Area	56a
IV-14	Return to US Treasury	57a

LIST OF TABLES (Continued)

Table		Page
IV-15	Trends in Downhill Skier Visits Central Oregon, 1973-1985. . .	57b
IV-16	Relative Share of Central Oregon Skiing Occasions for Central Oregon Ski Areas, 1963-1984	57c
IV-17	Place of Resident of Respondents by Usual Place of Ski Activity	60a
IV-18	Skier Visits Needed to Break Even	60a
IV-19	Comparison of Projected Skier Visits (Based on Demand) to Skier Visits Needed to Break Even in 1995	60b
VIII-1	Projected Alpine Skier Demand for Willamette Pass Ski Area in Lane County	104
VIII-2	Site Attraction Multiplier	105a
VIII-3	Skier Visits Needed to Break-Even (by Alternative)	109
VIII-4	Willamette Pass Area - Site Indicator Species	114
VIII-5	Sensitive Plants Associates	116

LIST OF MAPS

Map		Following Page
1	Project Location	iii
2	Vicinity (Central Cascades)	iii
3	Alternative I - No Change - Phase I only	5
4	Alternative II - Southside Only	7
5	Alternative III - One Northside Lift	9
6	Alternative IV - Two Northside Lifts (Preferred Alternative) .	9
7	Alternative V - Willamette Pass Ski Corporation Proposal	12
8	Alternative VI - Maximum Development	14
9	Avalanche Hazard	18
10	Soils Resource	18
11	Water Resource	18
12	Recreation Area Map (Highway 58 Corridor)	22
13	Recreation Resource	22
14	Recreation Opportunity Spectrum (Existing)	26
15	Visual Quality Objectives	26
16	Visual Absorption Capability	27
17	Existing and Potential Development For All Alternatives. . . .	42
18	Recreation Opportunity Spectrum (Alternatives III and IV-VI) .	44

LIST OF FIGURES

Figures		Following Page
1	Odell Lake	50a
2	Gold Lake	50a
3	Waldo Lake	50a
4	Maiden Peak	50a
5	Mt. Ray	50a
6	Mt. Fuji	50a



Purpose and Need

I. PURPOSE AND NEED

A. NATURE AND PURPOSE OF THE ACTION

In March of 1983, the Willamette Pass Ski Corporation submitted a Master Plan which proposed expansion of the area and development of additional facilities to cover ten (up to fifteen) years from 1985-2000. In response, the Forest Service conducted an environmental analysis documenting the design of alternatives and the analysis of the environmental consequences of each alternative through the environmental impact statement process of which this Final Environmental Impact Statement (FEIS) is a part.

The alternatives are consistent with implementation direction established in the Willamette National Forest Multiple Use Land Management Timber Management, FEIS, 1978 and Deschutes National Forest Land Management Plan, FEIS, 1978.

Physical, biological, social, and economic consequences of expanding the Willamette Pass Ski Area on the Deschutes and Willamette National Forests are addressed. The project study area lies about 70 miles southeast of Eugene on State Highway 58 (see Maps 1 and 2). The study area encompasses approximately 1,100 acres of National Forest land ranging in altitude from 5,120 to 6,700 feet. The surrounding area is characterized by relatively gentle topography, numerous pothole lakes and meadows, streams, and high peaks over 6,500 feet.

The intent of this analysis is to:

- Review and respond to the permittee's proposal for expansion of the area and addition of facilities.

- Examine existing and future recreational needs in the Eugene, Springfield, Oakridge, and Crescent areas.
- Display and compare the physical, biological, social, and economic environmental consequences of the proposal, alternatives to the proposal, and possible mitigative measures for public review and comment.
- Respond to issues raised by the public, organizations, and other agencies.

B. BACKGROUND OF THE WILLAMETTE PASS ALPINE WINTER SPORTS SITE

Established in 1939, the Willamette Pass Ski Area was the first operating ski area in the Central Cascades. The resort has been characterized as a "pitch-in-and-help" family ski area. Interest in Willamette Pass Ski Area, which offered a poma lift plus two rope tows, grew through the 1960's. But, in the 1970's interest in the area declined as the public was drawn to areas with new developed facilities.

In 1980, Rich and Lois Satagaj acquired the Willamette Pass Ski Area and attempts were made to install a new chairlift and new runs. Although approved by the Forest Service, the new permittees failed to acquire the necessary financial backing.

In 1981, the Satagaj's, together with the Wiper family, formed the Willamette Pass Ski Corporation. In 1982 and again in 1983, the corporation submitted plans for Phase I development which consisted of expanding the base area facilities and constructing new chairlifts and runs in the existing permit area. In 1982, the Forest Service granted approval for a new summit chair (A) to replace the poma lift and eight new ski runs. In 1983, permission was granted for con-

structing the Twilight Chair (B), beginner chair (C), four new runs, and expanding the day lodge and parking area (see Map 3). The environmental analysis for the Phase I developments are documented in two environmental assessments entitled Willamette Pass Ski Area, Phase One Master Plan, 1982 and 1983. Construction of Phase I facilities are scheduled to be completed during 1985.

The Willamette Pass Ski Corporation submitted their proposed Master Plan in March 1983. The Forest Service began its scoping process (defined in Appendix A) for the proposed expansion (entitled Phase II) in October 1983. Meetings were held with dispersed recreation interest groups on October 12, 1983, and private land-holders and permittees in the Crescent Lake Junction area on November 9, 1983. Numerous letters and phone conversations with members of the public indicated a high level of interest in the expansion proposal. The Forest Service led a public field trip to examine the area on June 16, 1984. Based on the continued high level of interest and concern for the project, the Forest Service in 1984 conducted three open house meetings to gather additional concerns: in Eugene (September 13), Oakridge (September 18), and Crescent Lake Junction (September 19). Strong opinions were expressed on both sides of the expansion issue. Because the decision to expand involves a substantial investment of private funds, a long-term allocation of National Forest land, the large number of people expressing an interest in the area and the number of people who use the area, Mike Kerrick, Forest Supervisor, Willamette National Forest, decided to use the formal environmental impact statement process. It was determined that a project-specific environmental

impact statement would be the preferred form of documentation (rather than the Forest Plan) due to the site-specific nature of a ski area development.

C. ISSUES AND CONCERNS TO BE ADDRESSED

Scoping for Willamette Pass Ski Area expansion was completed in the fall of 1984. It yielded the following set of significant questions that were addressed in detail during the planning and analysis phases. The answers to these significant questions are implicit in the text of the FEIS. For the reader's convenience, the specific references and/or responses to these questions, as well as a discussion of less significant issues, are contained in Appendix B.

1. Soil, Water, Wildlife, And Vegetation

- a. What effect might the project have on existing wildlife habitat? What species might be affected?
- b. What effect might the project have on soil and water resources? What might be the effect on the Gold Lake Bog? Skyline Creek?
- c. What effect might expansion have on the vegetation? What species would be affected? What is its commercial value?

2. Recreation

- a. How might expansion proposal effect the integrity of adjacent undeveloped areas?
- b. How might the expansion effect cross-country skiers, hikers, backpackers, and others who currently use the area?

c. What effect might the expansion have on the Pacific Crest National Scenic Trail?

d. What are the existing and future public demands for more winter sports development?

e. How might the expansion effect the quality and diversity of ski facilities at Willamette Pass?

f. How might the expansion proposal ensure better skiing conditions?

g. What provisions does the expansion have for nordic facilities such as groomed cross-country trails?

h. What effect will the expansion proposal have on overnight accommodations for skiers in the area?

3. Visual Resources

a. How might the expansion effect the visual quality as seen from Waldo, Gold, and Odell Lakes? The Pacific Crest National Scenic Trail?

b. What effect might expansion

have on the visual quality as seen from Maiden Peak, Mt. Fuji, and Mt. Ray?

4. Economic

a. What might be the economic effects on area residents? On local communities? On other Forest Service permittees?

b. Is the proposed expansion economically feasible?

c. What effect might the expansion have in the Eugene-Springfield area?

d. What effect might the expansion have on economic diversification in the Eugene-Springfield area? Lane County?

e. What effect might the expansion have on returns to the U.S. Treasury?

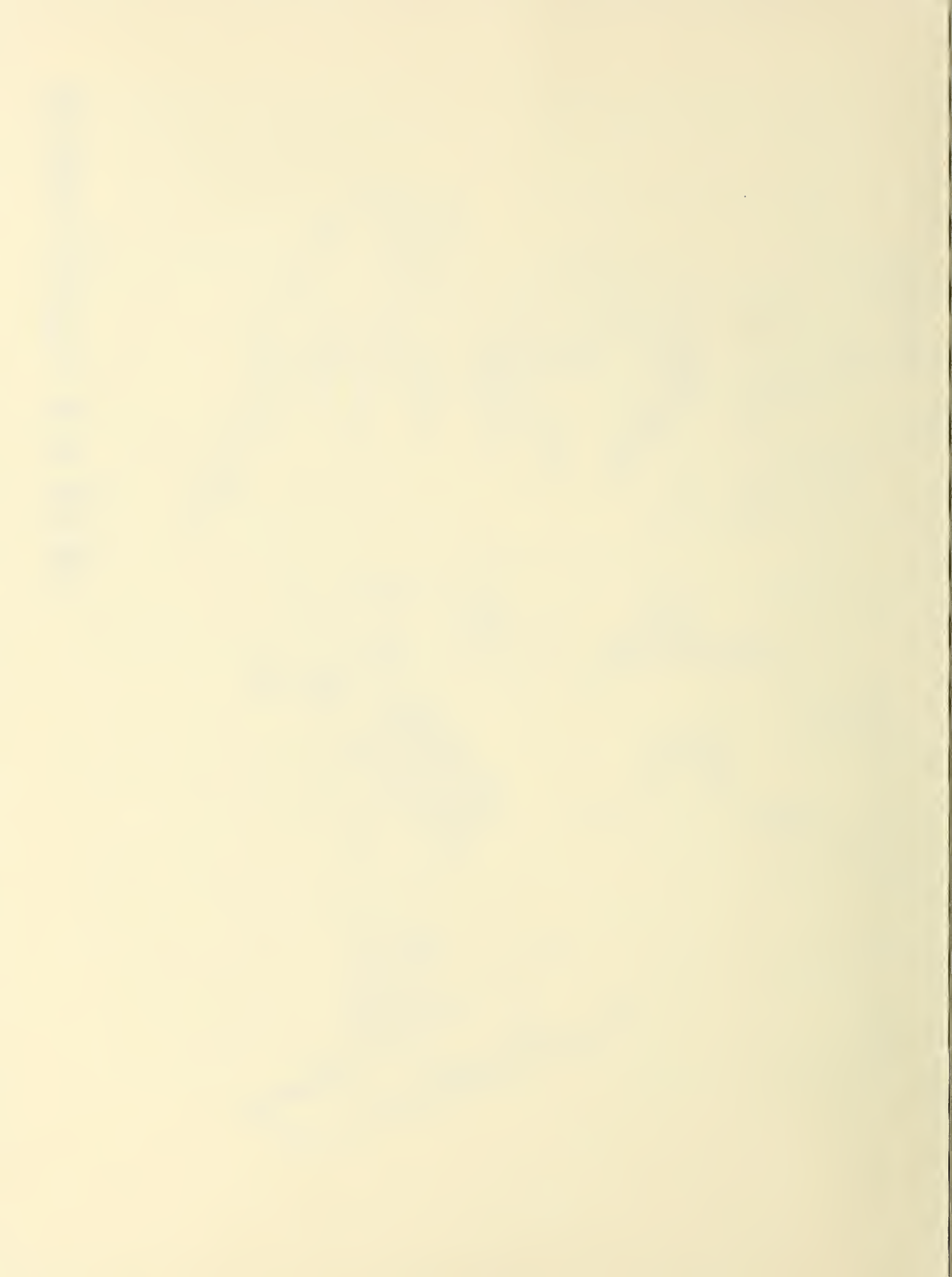
5. PUBLIC INPUT

a. Will there be additional public involvement?





Alternatives



II. ALTERNATIVES

This section describes the Willamette Pass Ski Corporation proposal, several feasible alternatives to that proposal, and mitigation measures. The description of alternatives is summarized in Table II-1. A comparison of the issue resolution by alternative is summarized in Table II-2.

A. APPROACH TO ALTERNATIVE FORMULATION

The alternatives to Willamette Pass Alpine Winter Sports Area were formulated by: first, establishing the low and high bounds of development; and second, determining an intermediate range of alternatives, including the Willamette Pass Ski Corporation proposal. The developments approved in Phase I constitute the lower limit, or the No Action Alternative. The upper limit was established by combining all the alternative facilities proposed in the Willamette Pass Ski Area Master Plan, and in subsequent conversations with the Corporation into one Maximum Development Alternative, VI. The actual Willamette Pass proposal formed an Intermediate Alternative, V. Three other mid-range alternatives (II, III and IV) were formulated by adding facilities onto the No Action or No Change-Phase I Only Alternative. Note that all facilities proposed in the alternatives have at one time or another been requested by the Willamette Pass Ski Corporation.

Based on comments received at the open house meetings, the interdisciplinary team looked at two additional alternatives (VII and VIII) as well as modifications of Alternatives II, IV, and V. These two additional alternatives are described below and modifications of II, IV, and V are described under the specific alternative.

B. ALTERNATIVES CONSIDERED AND ELIMINATED FROM DETAILED STUDY

Alternative VII includes removing all existing facilities at the Willamette Pass Ski Area and returning the area to its natural state. This alternative was eliminated from detailed consideration as an unreasonable alternative because of the existing ski area; the facilities owned by the Willamette Pass Ski Corporation in the base area are under a 20-year Forest Service Special Use Permit or contract to occupy designated National Forest land. If the Corporation is unable and/or unwilling to comply with the provision of their permit, the Forest Service would terminate the permit and the corporation would have a reasonable period of time to either remove their improvements from National Forest land or dispose of their interest in the area.

Alternative VIII would combine maximum development of the study area (Alternative VI) with the additional development of Maiden Peak just two and a half miles northeast of the existing ski area. The Forest Service investigated this possibility in 1982 by sponsoring a study by the University of Oregon entitled Maiden Peak Ski Area Feasibility (1982). The study indicated that slope conditions are limited almost exclusively to beginner and intermediate skiers. The construction of the first phase of Maiden Peak would cost in excess of \$5,800,000. Completion of the final phase would exceed \$23,000,000.

Given current market conditions and populations in Central Oregon, there is little likelihood that developing the study area to include Maiden Peak would be economically feasible. The direction established in the Willamette National Forest Multiple-Use Land Management Plan is to expand existing developed winter sports areas prior

Table II-1
SUMMARY OF ALTERNATIVES

ALTERNATIVE	ALTERNATIVE I NO ACTION PHASE I	ALTERNATIVE II SOUTHSIDE ONLY	ALTERNATIVE III ONE NORTHSIDE LIFT	(Preferred Alter.) ALTERNATIVE IV TWO NORTHSIDE LIFTS	ALTERNATIVE V WILL. PASS PROPOSAL	ALTERNATIVE VI MAXIMUM DEVELOPMENT
CAPACITY						
People at one time (PAOT)	2177	3688	3863	4500	4500	6694
Skiers at one time (SAOT)	1851	3135	3284	3994	4513	5690
OVERNIGHT ACCOMMODATIONS						
Hotel (30 Units)						X
Employee Housing (15 units)						
RV Sites (30 Units)	X	X		X	X	X
RECREATION OPPORTUNITIES						
Recreation Facilities						
Day Lodge, Parking Overpass, Ski Patrol Building	X	X	X	X	X	X
Summit Lodge				X	X	X
Nordic Center		X	X	X	X	X
Ski Lifts						
Existing (A,B,C)	X	X	X	X	X	X
D				X	X	X
E				X	X	X
F				X	X	X
G				X	X	X
H		X		X		X
Ski Runs						
On North Facing Slope	0	0	25	54	78	78
At Greater 5500 Foot Elevation	77 acres	77 acres	120 acres	119 acres	160 acres	170 acres
Total	110 acres	110 acres	146 acres	209 acres	217 acres	237 acres
Groomed Cross-Country		2.5 miles	2.5 miles	5 miles	5 miles	5 miles
Pacific Crest Nat'l Scenic Tr.	No Change	No Change	Relocate	Relocate	Relocate	No Change
- Parking required	627 cars	1037 cars	1086 cars	1266 cars	1266 cars	1883 cars
(Veh. stored on site)	7 buses	12 buses	13 buses	15 buses	15 buses	22 buses
Sewage and Water (People At One Time)	2177	3688	3863	4500	4500	6694
LAND USES						
Internal Roads	2.75 miles	2.75 miles	3.0 miles	6.50 miles	6.50 miles	6.50 miles
Parking Lots	9 acres	11 acres	13 acres	14.3 acres	14.3 acres	18.3 acres
Total Permit Area	400 acres	400 acres	525 acres	1100 acres	1100 acres	1100 acres

The X indicates that facilities are present under a specific alternative.

Table II-2

COMPARISON OF ISSUE RESOLUTION BY ALTERNATIVE

ISSUES	ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III	(Preferred Alter.)	ALTERNATIVE V	ALTERNATIVE VI
	No Change Phase I	Southside Only	One Northside Lift	Two Northside Lifts	Will. Pass Proposal	Maximum Development
1. What will be effect on soil, water, wildlife, and vegetation resources?						
a. Soil (on-site)						
1. Short-term loss of soil productivity and increase in erosion potential (after erosion control).	22 acres	23 acres	30 acres	42 acres	44 acres	33 acres 48 acres
2. Long-term acres re- moved from pro- duction.	16 acres	18 acres	20 acres	27 acres	29 acres	33 acres
b. Water						
Quality (on-site)	Minor increase in runoff.	Same as Alter- native I.	Same as Alter- native I.	Same as Alter- native I.	Same as Alter- native I.	Same as Alter- native I.
(off-site)	Minor increase in surface runoff to Sleepy Hollow Crk. Slight reduction in groundwater supply. Adequate supply of ground- water exists for domestic use for all alternatives.	Same as Alter- native I.	Same as Alter- native I.	Same as Alter- native I.	Same as Alter- native I.	Same as Alter- native I.

Table II-2

COMPARISON OF ISSUE RESOLUTION BY ALTERNATIVE (Continued)

ISSUES	ALTERNATIVE I No Change Phase I	ALTERNATIVE II Southside Only	ALTERNATIVE III One Northside Lift	(Preferred Alter.)			ALTERNATIVE V Will. Pass Proposal	ALTERNATIVE VI Maximum Development
				ALTERNATIVE III Two Northside Lifts	ALTERNATIVE IV Same as Alter- native I.	ALTERNATIVE V Same as Alter- native I.		
Quality (on & off site)	No expected change in water quality.	Same as Alternative I.	Same as Alternative I.	Same as Alternative I.	Same as Alternative I.	Same as Alternative I.		
c. Wildlife								
Deer & Elk (on-site)	Forage available 88 acres	Same as Alternative I. 91 acres	Same as Alternative I. 119 acres	Same as Alternative I.	Same as Alternative I.	Same as Alternative I.	176 acres	192 acres
	No Change	No Change	Short-term displacement during lift construction. Decreased use of corridors.	See Alternative III.	See Alternative III.	See Alternative III.		See Alternative III.
Wolverine (on-site)	No Change	No Change	Loss of habitat utilization.	See Alternative III.	See Alternative III.	See Alternative III.		See Alternative III.
(off-site)			Possible loss of habitat utilization in Douglas Horse Pasture and Cold Lake Bog.	See Alternative III.	See Alternative III.	See Alternative III.		See Alternative III.
Fisher & Marten (on-site)	No Change	No Change	Loss of habitat due to increased human activity possibly offset by decreased trapping.	See Alternative III.	See Alternative III.	See Alternative III.		See Alternative III.
d. Vegetation	Old growth converted to early successional stages. 110 acres	See Alternative II. 113 acres	See Alternative II.	See Alternative II.	See Alternative II.	See Alternative II.	220 acres	240 acres

Table II-2

COMPARISON OF ISSUE RESOLUTION BY ALTERNATIVE (Continued)

ISSUES	(Preferred Alter.)					
	ALTERNATIVE I No Change Phase I	ALTERNATIVE II Southside Only	ALTERNATIVE III One Northside Lift	ALTERNATIVE IV Two Northside Lifts	ALTERNATIVE V Will. Pass Proposal	ALTERNATIVE VI Maximum Development
2. How might expansion affect recreation resources?						
a. Adjacent undeveloped areas						
Roaded Natural (1) (on-site)	No Change	No Change	+133 acres	+1418 acres	+1418 acres	+1418 acres
Semi-Primitive (off-site)	No Change	No Change	-133 acres	-1406 acres	-1406 acres	-1406 acres
Primitive (off-site)	No Change	No Change	No Change	-1012 acres	-1012 acres	-1012 acres
			Over 35,000 acres of semi-private & primitive acres retained in un- roaded condition.	See Alternative III.	See Alternative III.	See Alternative III.
b. Dispersed Users (hikers, cross-country skiers, etc.)	No Change	No Change	Minor change in user experience.	Same as Alter- native III.	Same as Alter- native III.	Same as Alter- native III.
c. Pacific Crest National Scenic Trail (PCNST)	No Change	No Change	PCNST relocation will improve scenic quality and skiability. Add new cross-country loop trail.	Same as Alter- native III.	Same as Alter- native III.	Decrease in scenic quality on PCNST
d. Public demand for ski- ing at Will. Pass Skier Visits in 1995 (Low Estimate)	59,010	64,910	70,810	94,420	100,320	112,120

(1) Definitions are included in Appendix A

Table II-2

COMPARISON OF ISSUE RESOLUTION BY ALTERNATIVE (Continued)

ISSUES	(Preferred Alter.)					
	ALTERNATIVE I No Change Phase I	ALTERNATIVE II Southside Only	ALTERNATIVE III One Northside Lift	ALTERNATIVE IV Two Northside Lifts	ALTERNATIVE V Will. Pass Proposal	ALTERNATIVE VI Maximum Development
e. Quality and diversity of ski facilities at Willamette Pass.	No Change	No Change	Increase in diversity of alpine facilities. Better mix of beginner, intermediate, and advanced runs.	Same as Alternative III.	Same as Alternative III.	Same as Alternative III.
f. Skiing conditions	No Change	No Change	Provides for more consistent and higher quality of skiing and extended length of season.	Same as Alternative III.	Same as Alternative III.	Same as Alternative III.
g. Nordic Facilities	No Change	Addition of a Nordic center and 2.5 to 5 miles of groomed track.	See Alternative II.	See Alternative III.	See Alternative III.	See Alternative III.
h. Overnight Accommodations	No Change	No Change	No Change	No Change	Further study needed to determine effects.	See Alternative IV.
3. What effect might expansion have on visual quality as seen from:						
a. Odell Lake	Existing and proposed facilities meet modification VQO.	See Alternative I.	See Alternative II.	See Alternative I.	See Alternative I.	See Alternative I.
b. Gold Lake	No change	No change	No change	No change	Meets modification to partial retention VQO.	See Alternative IV.
c. Waldo Lake	No change	No change	No change	No change	No change	No change
d. Malden Peak	No change	No change	No change	Meets modification VQO.	See Alternative IV.	See Alternative IV.

Table II-2

COMPARISON OF ISSUE RESOLUTION BY ALTERNATIVE (Continued)

ISSUES	(Preferred Alter.)					
	ALTERNATIVE I No Change Phase I	ALTERNATIVE II Southside Only	ALTERNATIVE III One Northside Lift	ALTERNATIVE IV Two Northside Lifts	ALTERNATIVE V Will. Pass Proposal	ALTERNATIVE VI Maximum Development
e. Mt. Ray	No change	No change	No change	No change	Meets modifica- tion VQO.	See Alternative IV.
f. Mt. Fuji	No change	No change	No change	No change	Meets modifica- tion VQO.	See Alternative IV.
4. What effect might the ex- pansion have on the social- economic environment.						
a. Local Communities Seasonally Employed Persons	103	174	182	232	250	318
	No significant changes in popula- tion or impacts on community services anticipated.	See Alternative II.	See Alternative II.	See Alternative II.	See Alternative II.	See Alternative II.
b. Econ. Feasibility	All alternatives have potential to break even.	See Alternative II.	See Alternative II.	See Alternative II.	See Alternative II.	See Alternative II.
c. Secondary revenue to market area:						
Annual Return	\$3.51 million	\$4.20 million	\$5.22 million	\$5.40 million	\$6.54 million	\$4.68 million
One-Time Return	\$5.48 million	\$6.74 million	\$6.74 million	\$10.70 million	\$12.34 million	\$13.50 million
d. Economic Diversification	All alternatives will increase economic diversifi- cation in pri- mary market area.	See Alternative II.	See Alternative II.	See Alternative II.	See Alternative II.	See Alternative II.
e. Returns to U.S. Treasury:						
Annual Return	\$18,250	\$31,000	\$32,460	\$41,930	\$45,210	\$57,130
One-Time Return	\$109,863	\$113,613	\$158,923	\$243,923	\$253,923	\$281,423
5. Will there be additional public input	The public has 60 days to respond to DEIS.	See Alternative II.	See Alternative II.	See Alternative II.	See Alternative II.	See Alternative II.

to development of any new areas (in accordance with Regional policies). For these reasons this alternative was eliminated from detailed investigation.

C. ALTERNATIVES CONSIDERED

Each alternative description is followed by a map showing the proposed facilities. Mitigation measures developed in Chapter IV are also included in this section. The general mitigation measures which follow Alternative I apply to all alternatives. Specific mitigation requirements designed for Alternatives II through VI are included under the individual alternative descriptions.

ALTERNATIVE I: No Change - Phase I Only

Alternative I is the "No Action" alternative. Management of the existing and proposed facilities at Willamette Pass Ski Area would remain the same as approved in the 1982 and 1983 Decision Notices on the Willamette Pass Ski Area, Phase One Master Plan. To avoid confusion on this point, the "No Action" alternative will be called the "No Change - Phase I Only" alternative instead. Note that in Map 3, the existing permit boundary and the alternative boundary are the same.

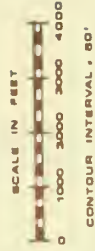
Area Involved: 400 acres

Capacity: 2,177 people at one time (PAOT); 1,851 skiers at one time (SAOT)

Facilities: The existing level of development would be retained on a continuing basis. After completion of Phase I, facilities will consist of:

- A day lodge with restaurant, bar, day care center, and ski shop, serving 2,177 people at one time.

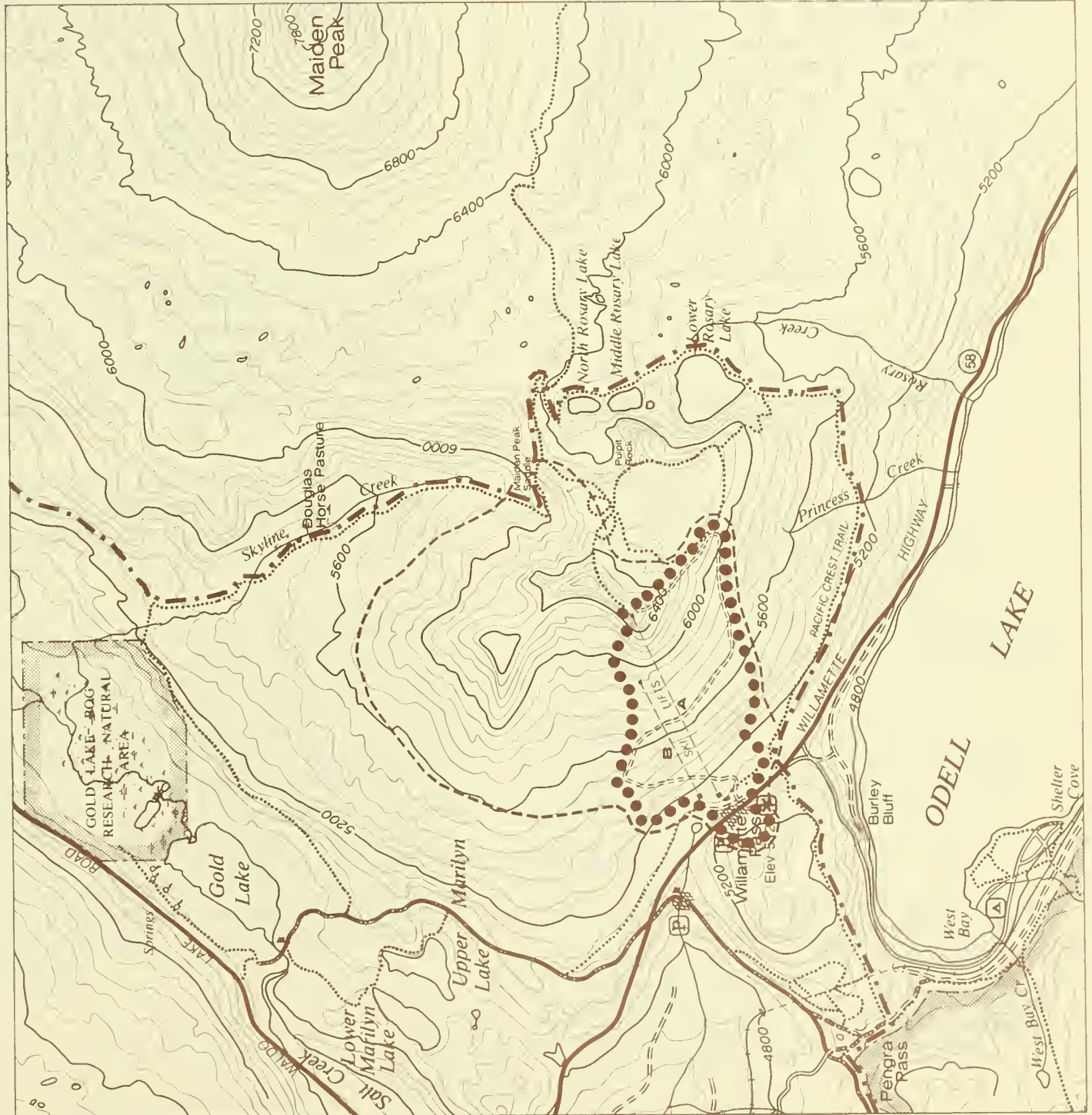
- One double chair (A) to the 6,700-foot level (capacity 704 SAOT).
- One triple chair (B) to the 6,000-foot level (capacity 947 SAOT).
- A new beginner lift (200 SAOT) to replace the existing tow.
- Additional lighting installed for night skiing on Peek-A-Boo, By George, and Rough Cut runs.
- 13 skiable runs.
- 110 total acres of ski runs with 44 acres for beginner, 38 acres for intermediate, and 28 acres for advanced skiers. 77 acres of runs are greater than 5,500 feet in elevation.
- Nine acres of parking to accommodate 627 cars and 7 buses.
- 2.75 miles of access road to summit of Eagle Peak.
- Restrooms serving 2,177 people.
- A water system serving 2,040 people.
- A first aid, ski school, and ski patrol building.
- A maintenance building/power plant.
- Administrative and employee office space.
- Overpass installed to connect additional parking area south of Highway 58.
- 30 RV units added in parking lot south of Highway 58.

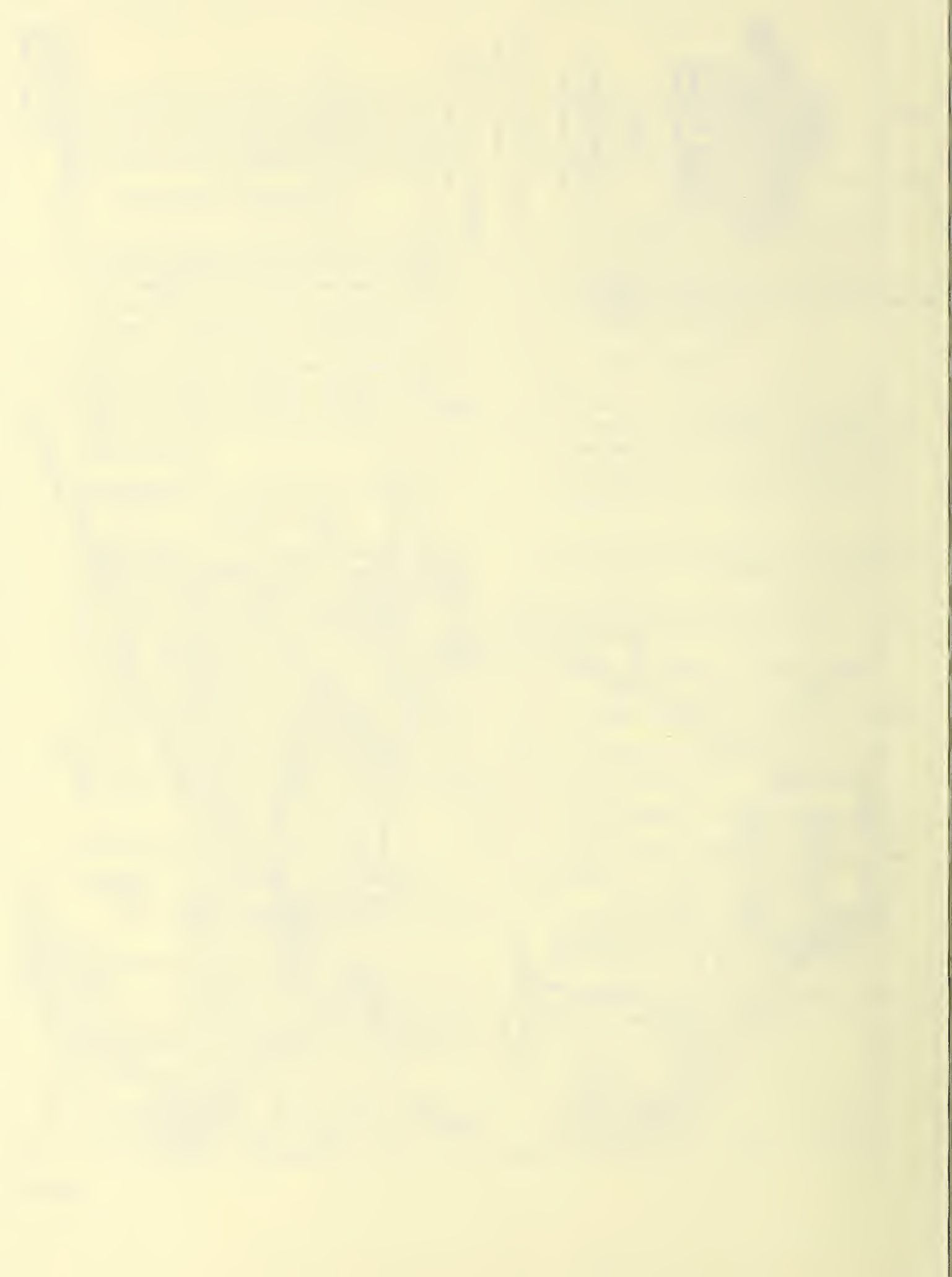


LEGEND

- Study Area Boundary
- Permit Area Boundary
- Alternative Boundary
- Ski Lift
- Nordic Ski Trail
- Pacific Crest Trail

ALTERNATIVE I
(NO CHANGE)
(Phase 1 only)





GENERAL MITIGATION MEASURES

The following general mitigative measures apply to all alternatives.

Air Quality

- Any burning activities associated with construction will follow established Forest Service smoke management practices.
- The Special Use Permit will insure prompt revegetation or other protection of all disturbed areas to reduce dust.

Avalanche Hazard

- As a requirement of the Special Use Permit, the ski patrol must evaluate and ski test potential avalanche areas, or use hand charge explosives to eliminate slide dangers before the public is permitted to ski the slope.
- To prevent skiers from entering uncontrolled avalanche hazard areas, area boundary signs will be posted.

Soils

- Prior to the start of each season, the permittee will submit final construction plans for approval by the Forest Service. These plans will also contain Forest Service requirements to successfully revegetate all bare soil. To reduce the chance of concentrating surface runoff on access roads, outsloping and/or installing waterbars will be required. Compliance with all approved erosion control and revegetation measures will be a requirement of the Special Use Permit.

Water

- The permittee will be required to maintain water quality on National Forest lands. The Forest Service will require all facilities which might produce runoff tainted with salt, motor fuel, oils, diesel, or other noxious substances to be located in such a way that the runoff water does not reach stream channels or ground water sources. The operating plan will be reviewed by Oregon Department of Environmental Quality (DEQ) and any recommendations will be incorporated into the Special Use Permit.

- Salting runs or using other chemicals to improve snow conditions is prohibited.

Wildlife

- Reseed slopes with edible grass species for deer and elk.

Recreation

- Require signing or parking lot attendant for safety and to inform public when the lots are full.
- Night skiing permitted on south side only, including Peek-A-Boo, By George, and Rough Cut runs.

Visual Resources

- Require post-season cleanup of runs and lift lines by permittee.

Cultural Resources

- If cultural resources are located prior to or during construction under contract clause C6.24#, work affecting that specific site will have to be halted until cultural resource management compliance is complete (36 CFR 800), though other

activities/work may continue in unaffected portions of the overall project.

ALTERNATIVE II: South Side Only

Alternative II would permit full development on the south side of Eagle Peak. Visual quality would be the same in the unroaded areas. Note that in Map 4, the existing permit boundary and the alternative boundary are the same.

Area Involved: 400 acres

Capacity: 3,688 people at one time (PAOT); 3,135 skiers at one time (SAOT)

Facilities: Existing and approved facilities, as identified in the No Change - Phase I Only alternative, would be augmented by the following improvements:

- Restaurant, restroom, and water capacity in day lodge increased to serve 1,511 additional PAOT.
- Triple chair (H) installed parallel to the existing summit chair (A) to the 6,700-foot level (capacity 1,284 SAOT).
- Nordic center installed and 2.5 miles of groomed cross-country ski trails constructed west of the base area.
- Parking lot expanded to 11 acres to accommodate 1,037 cars and 12 buses.

MITIGATION MEASURES FOR ALTERNATIVE II

In addition to the general mitigation measures that apply to all alternatives, the following will apply:

Soils

- Revegetation will be 80% successful on existing runs prior to clearing new area.
- Timber harvesting will follow standard Forest Service harvest practices and methods.
- In order to minimize impact on soil productivity during chair lift and run construction:
 - No tractor operations permitted on slopes greater than 30%.
 - Use low-impact equipment (such as the McKenzie Mucker) on slopes greater than 67%.
 - Use helicopter to install chairlift towers on slopes greater than 30%.

ALTERNATIVE IIB

In order to increase the ski area capacity and retain the unroaded nature of the north slopes, the interdisciplinary team considered an Alternative IIB, with maximum development of the south sides of both Eagle and West Peaks.

This modified alternative proposes an additional triple chairlift (G from the base of Duck Soup to 6,650-foot level of West Peak) which would offer a total capacity of 3,608 skiers at one time (SAOT) or 4,245 people at one time (PAOT). The total permit area would be 600 acres. (See location of G Chairlift on Map 6.)

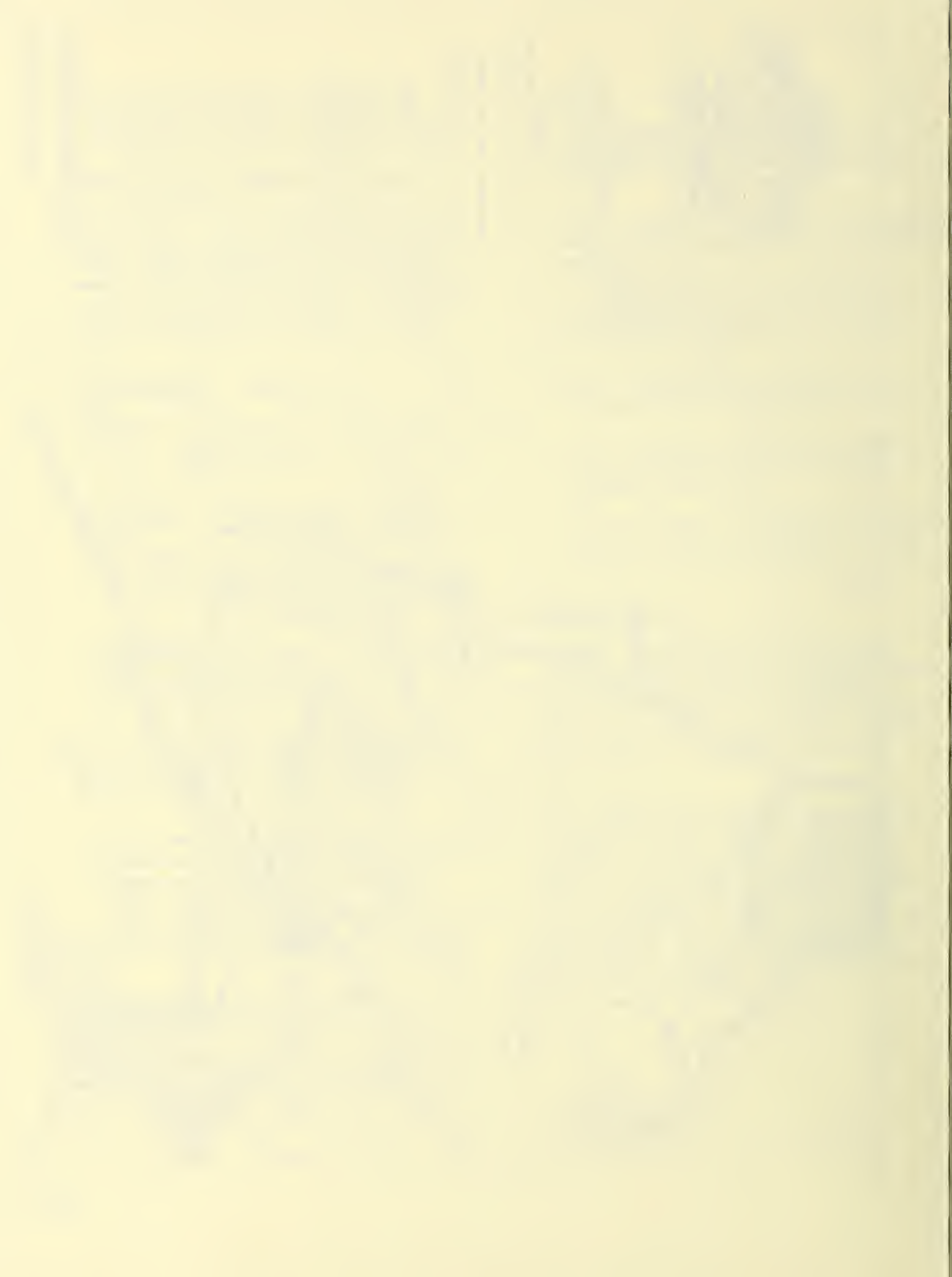


LEGEND

- Study Area Boundary
- Permit Area Boundary
- Alternative Boundary
- Ski Lift
- Proposed Ski Lift
- Nordic Ski Trail
- Pacific Crest Trail



ALTERNATIVE II (SOUTHSIDE ONLY)



ALTERNATIVE III: One North Side Lift

Alternative III would allow the construction of one lift (D) on the north side of Eagle Peak as part of the expansion proposal (Map 5). Use of the north side would provide opportunities for better snow conditions (see discussion on aspect and exposure in chapter III) while retaining the visual quality of the undeveloped area as seen from Gold or Waldo Lakes. This alternative would reroute the Pacific Crest National Scenic Trail (PCNST) to retain the semi-primitive experience and enhance scenic vistas for trail users.

Area Involved: 525 acres

Capacity: 3,863 people at one time (PAOT); 3,284 skiers at one time (SAOT)

Facilities: Existing and approved facilities, as identified in the No Change - Phase I Only alternative, would be augmented by the following improvements:

- Restaurant, restroom, and water capacity in day lodge increased to serve 1,686 additional PAOT.
- Triple chair (D) installed west of Maiden Peak Saddle to the 6,700-foot level of Eagle Peak (capacity 853 people).
- Existing double chair (A) replaced with a triple chair (A1), to increase capacity by 580 people (new capacity 1,284 people).
- Nine new runs constructed which would add 10 acres for beginner, 15 acres for intermediate, and 11 acres for advanced skiers.

- An additional 43 acres of runs would be above the 5,500-foot level; 26 acres of runs would be on north-facing slopes.
- Three miles of the PCNST relocated to north ridge between Skyline Creek and Maiden Peak.
- A 0.25-mile access road built to top of D lift.
- Nordic center installed and 2.5 miles of groomed cross-country ski trails constructed west of the base area.
- Parking lot area expanded to 13 acres to accommodate 1,086 cars and 13 buses.

MITIGATION MEASURES FOR ALTERNATIVE III

In addition to the general mitigation measures that apply to all alternatives, the following will apply:

Soils

- Same mitigation measures as described in Alternative II.
- To protect the more nutrient-rich surface soil horizon and protective duff layer, stump removal on ski runs will be prohibited on north slopes. Snow cover should be adequate to cover stumps.

Water

- Require top drive power operation of D lift.
- The permittee will be required to follow safe transporting practices, sound construction methods for diesel storage tanks, conduct regular monitoring (using early warning systems and/or area-wide surveillance

methods), provide an effective hazard spill contingency plan and other measures designed to prevent diesel spills.

Wildlife

- Restrict summer lift activities to south slopes of Eagle and West Peaks.
- To enhance marten habitat, pile slash along runs to increase rodent populations.
- Relocation of the Pacific Coast Trail will be carefully located to avoid critical wildlife habitat areas.
- Restrict D lift construction to mid to late summer.

Vegetation

- During the design phase conduct an intensive on-the-ground inventory of the areas after trail, ski runs, and chairlift have been flagged. Adjust design to conserve all sensitive plant species as necessary.

Recreation

- Provide nordic skiers access from Maiden Peak Saddle to Skyline Creek.
- The relocated PCNST will meet design and construction criteria outlined in the National Trail System Act. A special effort will be made to meet cross-country ski standards (grade and alignment), to accommodate winter use, and to offer the winter and summer user the best views possible. These requirements will be made a part of the permittee's operating plan. Relocation will take place prior to or during installation of D lift.

Noise

- Restrict snow grooming activities to evening or early morning. Retain maximum vegetation in surrounding area to absorb noise.
- Provide copy of chairlift design to D.E.Q. for review. Restrict noise level to 45 DBA within 50 feet of chairlift.

Visual Resources

- Feather runs with islands and natural openings to make visual appearance more natural.
- Color of new ski lift towers and chairs will blend with natural environment.

ALTERNATIVE IV (Preferred Alternative): Two North Side Lifts

Alternative IV would allow full development on the south and north slopes of Eagle and West Peaks (Map 6). Use of the north slopes would provide opportunities for better snow conditions while retaining visual quality of the undeveloped area as seen from Gold and Waldo Lakes. This alternative would reroute the Pacific Crest National Scenic Trail (PCNST) to retain semi-primitive experience and enhance scenic vistas from the trail for trail users.

Area Involved: 1,100 acres

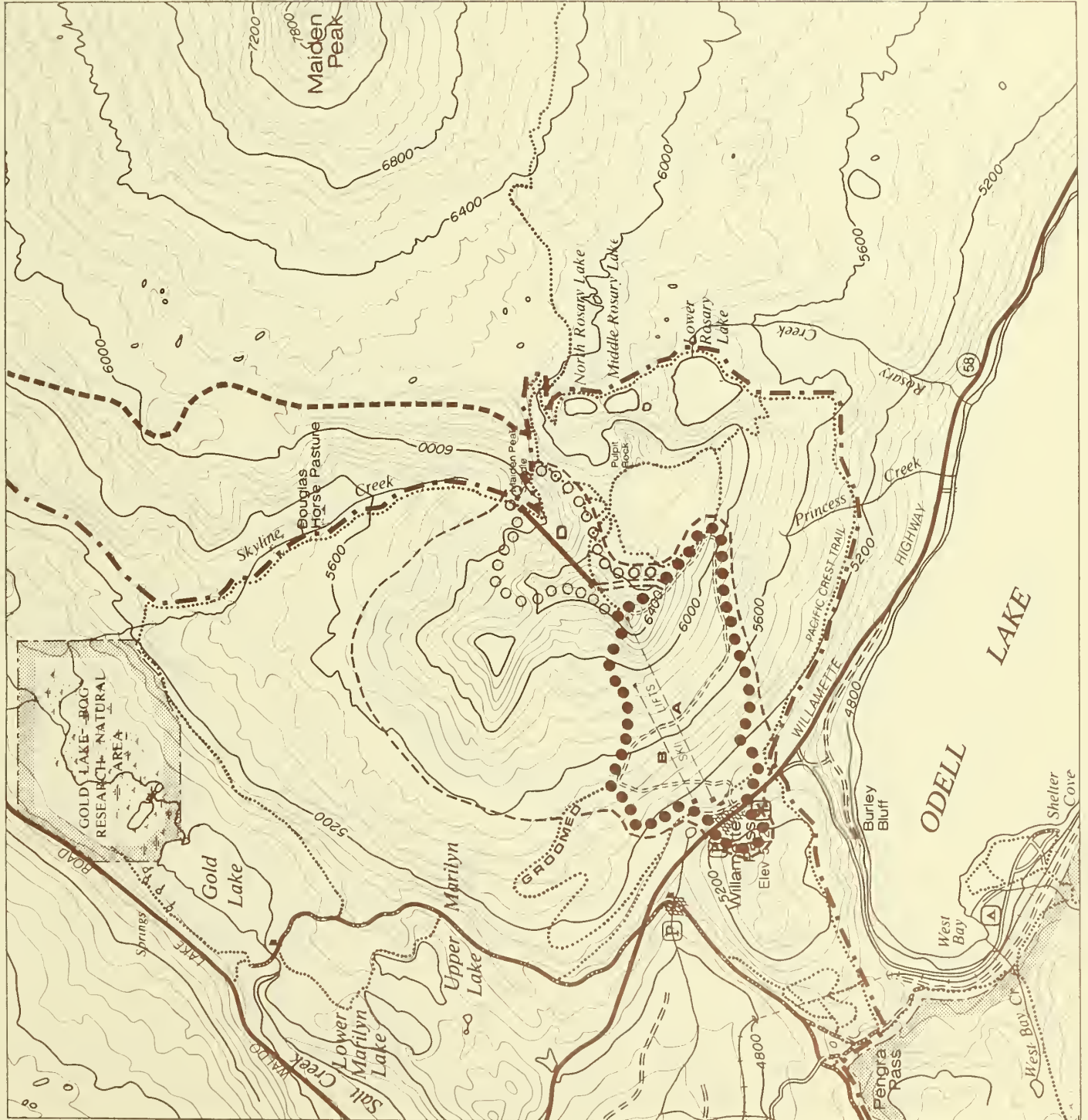
Capacity: 4,500 people at one time (PAOT); 3,994 skiers at one time (SAOT)

Facilities: Existing and approved facilities, as identified in the No Change - Phase I Only alternative, would be augmented by the following improvements:



LEGEND

- Study Area Boundary
- Permit Area Boundary
- Alternative Boundary
- Ski Lift
- Proposed Ski Lift
- Proposed Access Road
- Nordic Ski Trail
- Pacific Crest Trail Relocation
- Pacific Crest Trail

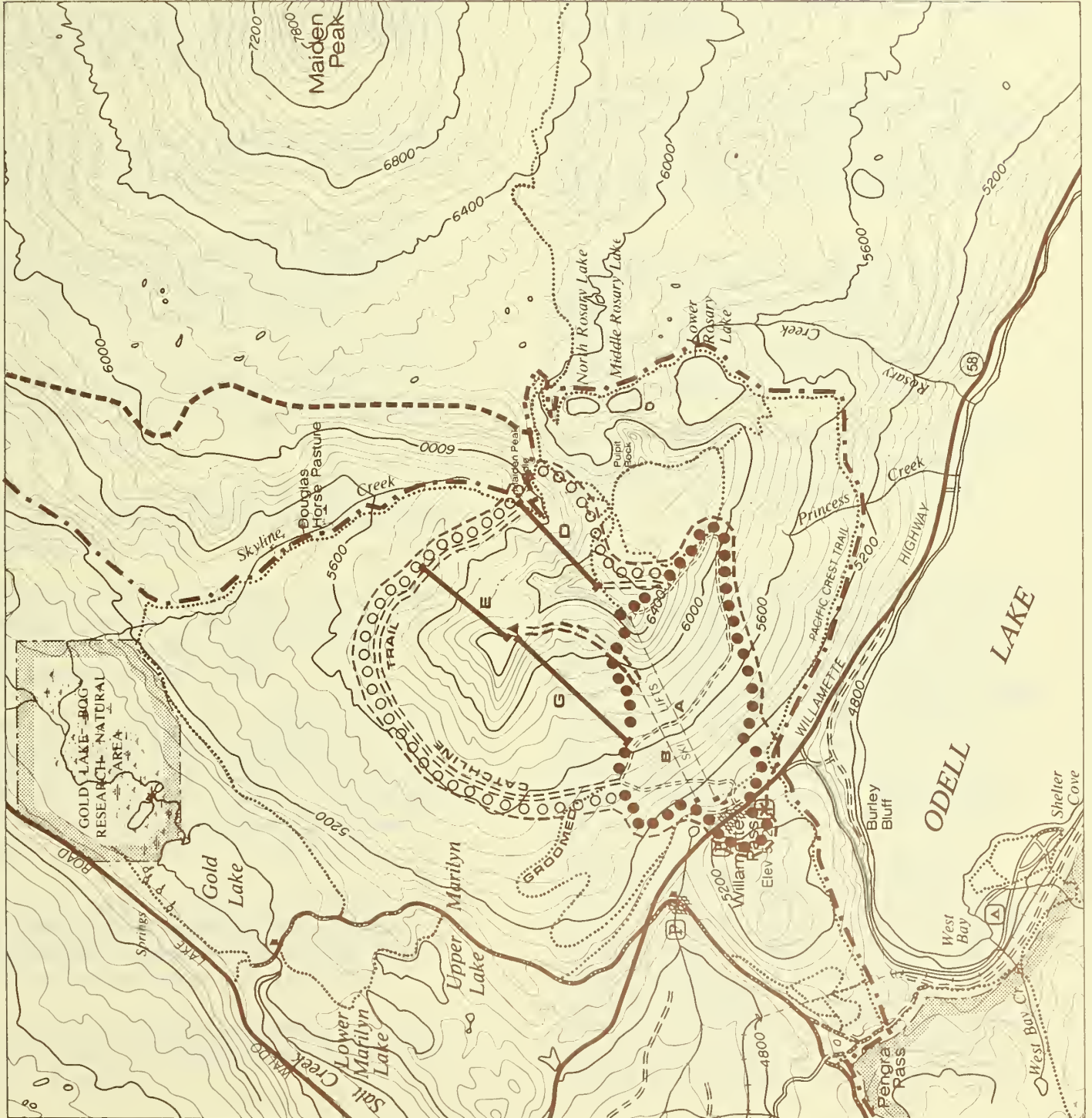


ALTERNATIVE III
(ONE NORTHSIDE LIFT)



LEGEND

- Study Area Boundary
- Permit Area Boundary
- Alternative Boundary
- Ski Lift
- Proposed Ski Lift
- Proposed Access Road
- Nordic Ski Trail
- Pacific Crest Trail Relocation
- Proposed Summit Lodge Location
- Pacific Crest Trail



ALTERNATIVE IV
(TWO NORTHSIDE LIFTS)
Preferred Alternative

- Restaurant, restroom, and water capacity in day lodge increased to serve 2,323 additional PAOT.
- Triple chair (D) installed west of Maiden Peak Saddle to 6,700-foot level of Eagle Peak (capacity 853 SAOT).
- Triple chair (E) installed southwest of Douglas Horse Pasture to 6,680-foot level of West Peak (capacity 817 SAOT).
- Triple chair (G) installed from Duck Soup to 6,650-foot level of West Peak (capacity 473 SAOT).
- Sixteen new runs constructed which would add 27 acres for beginner, 61 acres for intermediate, and 11 acres for advanced skiers.
- An additional 70 acres of runs would be above the 5,500-foot level; 54 acres of runs would be on north-facing slopes.
- Three miles of the PCNST relocated to north ridge between Skyline Creek and Maiden Peak.
- Summit Lodge, restrooms, water, and sewage systems constructed for 426 skiers at one time on saddle southeast of West Peak.
- One-mile access road constructed to Summit Lodge from southside. A 2.5-mile access road built around base of West Peak will serve as a catchline for lost skiers; 0.25-mile access road built to top of D lift.
- Nordic center installed, 2.5 miles groomed cross-country ski trails constructed west of base area and 2.5 miles along catchline road.
- Parking lot area expanded to 14.3 acres to accommodate 1,266 cars and 15 buses.

MITIGATION MEASURES FOR ALTERNATIVE IV

In addition to the general mitigation measures that apply to all alternatives, the following will apply:

Soils

- Same mitigation measures as described in Alternative II.
- To protect the more nutrient-rich surface soil horizon and protective duff layer, stump removal on ski runs will be prohibited on north slopes. Snow cover should be adequate to cover stumps.
- Catchline road will be built to minimum standards (roughly 12 feet wide). Clearing on catchline road will be kept to a minimum width (approximately 20 feet) needed for groomed cross-country tracks.
- Road to Summit Lodge will be built to the minimum standards necessary to construct and maintain facilities.

Water

- Provide for top drive power operation for D lift and either top drive for E or combined power generation for E and G lifts and Summit Lodge with power facilities located on the summit or on the south side at the base of the G lift. Diesel fuel will not be transported on catchline road on north slope. It may be transported on south slopes or along ridge top.
- The permittee will be required to follow safe transporting practices, sound construction methods for diesel storage tanks, conduct regular monitoring (using early warning systems and/or area-wide surveillance methods), provide an effective hazard spill contingency plan and other measures designed to prevent spills.

- As part of the Special Use Permit requirements, the permittee will submit detailed, on-site, sewage disposal plans for the Summit Lodge to the Forest Service and appropriate state and county departments. Prior to construction, permits for sewage disposal must be obtained from D.E.Q.

Wildlife

- Allow only administrative and maintenance-motorized use of catchline and other service roads.
- Restrict summer lift activities to south slopes of Eagle Peak.
- Construct Summit Lodge in such a way as to minimize disruption of deer and elk travel corridor. This may involve locating the building 200 to 300 feet northwest of the saddle.
- To enhance marten habitat, pile slash along runs to increase rodent population.
- Restrict D, E and G lifts, Summit Lodge and catchline road construction activities to mid to late summer.

Vegetation, Noise and Recreation

- Same mitigation measures as described for Alternative III.

Visual Resources

- Color and design of Summit Lodge will blend with natural environment. Provide opportunity for public input during design stages through the environmental analysis process.
- Construct road to Summit Lodge from south side in such a manner as to retain visual integrity. Follow proposed ski runs and lift lines where possible.

- Feather runs with islands and natural openings to make visual appearance more natural.
- Color of new ski lift towers and chairs will blend with natural environment.
- The surface and cleared right-of-way on the catchline road will be seeded to reduce visual resource impacts.

Economics

- The above facilities are approved in concept. The timing and exact design and location of such facilities are subject to further review. The permittee will be required to demonstrate: 1) a market need for additional facilities based on updated use information and trend, 2) economic feasibility and 3) cash and/or assets to build and operate proposed facilities.

ALTERNATIVES IVB, IVC, AND IVD

In response to public input, the team considered several modifications of the two north side lift alternatives:

Entitled Alternative IVB, IVC, and IVD. Alternative IVB considers the addition of overnight accommodations. Alternative IVC proposes building two north side lifts ~~without~~ the Summit Lodge or catchline road on the north slope. Alternative IVD also proposes installing two north side lifts; but instead of new south side lift G, it proposes upgrading the existing summit chair (A) from double to a triple chair. The ski lift capacity would increase by 107 skiers at one time.

The modifications of Alternative IV are summarized in Table II-3.

Table II-3

SUMMARY OF ALTERNATIVE IV (PREFERRED ALTERNATIVE)
AND MODIFICATIONS (IVB, IVC, and IVD)

ALTERNATIVE	!	IV	!	IVB	!	IVC	!	IVD
<u>Capacity</u>	!		!		!		!	
People at One Time (PAOT)	!	4500	!	4500	!	4500	!	4140
Skiers at One Time (SAOT)	!	3994	!	3994	!	3994	!	4101
<u>Overnight Accommodations</u>	!		!		!		!	
Motel - 30 Units	!		!	X	!		!	
<u>Recreation Opportunities</u>	!		!		!		!	
Summit Lodge	!	X	!	X	!		!	X
Ski Lifts	!		!		!		!	
Existing (A,B,C)	!	X	!	X	!	X	!	X
D	!	X	!	X	!	X	!	X
E	!	X	!	X	!	X	!	X
G	!	X	!	X	!	X	!	
Ski Runs	!		!		!		!	
5500 Foot Elevation	!	149 Acres	!	149 Acres	!	149 Acres	!	120 acres
Groomed Cross-Country	!	5 Miles	!	5 Miles	!	2.5 Miles	!	5 Miles
Internal Roads	!	6.25 Miles	!	6.26 Miles	!	2.75 Miles	!	6.25 Miles

ALTERNATIVE V: Willamette Pass Ski Corporation Proposal

Alternative V is the alternative proposed by Willamette Pass Ski Corporation in the 1983 Phase II Plan (see Map 7).

Area Involved: 1,100 acres

Capacity: 4,500 people at one time (PAOT); 4,513 skiers at one time (SAOT)

Facilities: Existing and approved facilities, as identified in the No Change - Phase I Only alternative, would be augmented by the following improvements:

- Restaurant, restroom, and water capacity increased in day lodge to serve 2,323 additional PAOT.
- Triple chair (D) installed west of Maiden Peak Saddle to 6,700-foot level of Eagle Peak (capacity 853 SAOT).
- Triple chair (E) installed southwest of Douglas Horse Pasture to 6,680-foot level of West Peak (capacity 817 SAOT).
- Triple chair (F) installed from base northwest of West Peak to southwest of summit (capacity 412 SAOT).
- Existing double chair (A) replaced with triple chair (A1) to increase capacity by 580 people.
- Twenty-three new runs constructed which would add 25 acres for beginner, 64 acres for intermediate and 2 acres for advanced skiers.
- An additional 63 acres of runs would be above the 5,500-foot level, 78 acres of runs would be on north facing slopes.

- Three miles of PCNST relocated to north ridge between Skyline Creek and Maiden Peak.
- Summit Lodge, restrooms, water, and sewage systems constructed for 426 people on saddle southeast of West Peak.
- One-mile access road constructed to Summit Lodge. A 2.5-mile access road built around West Peak will serve as a catchline for lost skiers; 0.25-mile access road built to top of D lift.
- Nordic center installed, 2.5 miles groomed cross-country ski trails constructed west of base area and 2.5 miles along catchline road.
- Overnight accommodations (30 units) and employee housing (15 units) built in parking lot south of Highway 58.
- Parking lot area expanded to 14.3 acres to accommodate 1,266 cars and 16 buses.

MITIGATION MEASURES FOR ALTERNATIVE V

In addition to the general mitigative measures that apply to all alternatives, the following will apply:

Soils

- Same mitigation measures for soils as described under Alternative IV.

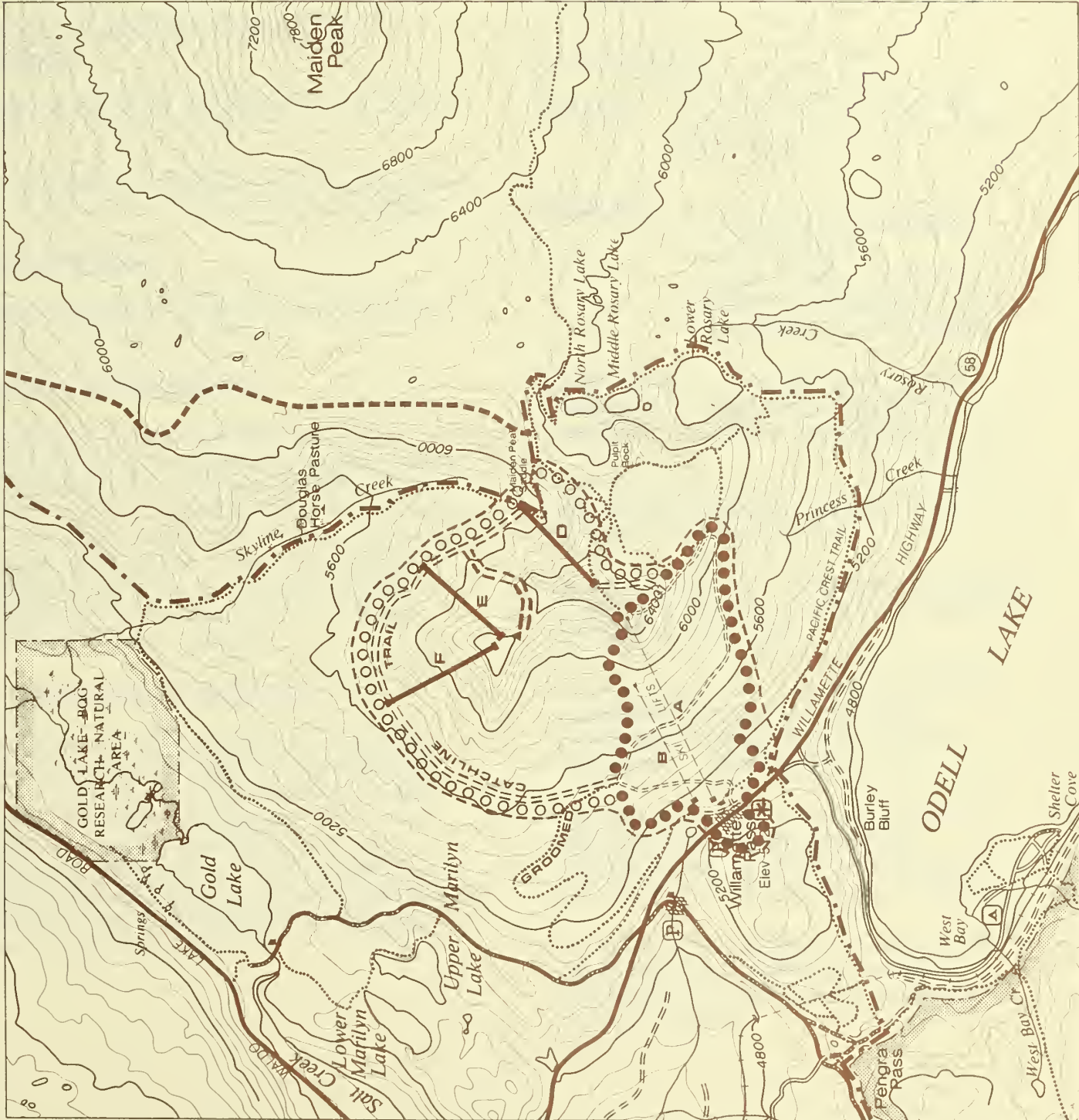
Water

- The permittee will be required to follow safe transporting practices, sound construction methods for diesel storage tanks, conduct regular monitoring (using early warning systems and/or area-wide surveillance methods), provide an effective hazard spill contingency plan and other measures designed to prevent spills.



LEGEND

- Study Area Boundary
- Permit Area Boundary
- Alternative Boundary
- Ski Lift
- Proposed Ski Lift
- Proposed Access Road
- Nordic Ski Trail
- Pacific Crest Trail
- Relocation
- Proposed Summit Lodge
- Location
- Pacific Crest Trail



ALTERNATIVE V
(Willamette Pass
Ski Corp. Proposal)

- As part of the Special Use Permit requirements, the permittee will submit detailed, on-site, sewage disposal plans for the Summit Lodge to the Forest Service and appropriate state and county departments. Prior to construction, permits for sewage disposal must be obtained from D.E.Q.

Wildlife, Vegetation, Noise, and Recreation

- Same mitigation measures as described under Alternative IV.
- In addition, restrict F lift construction activities to mid to late summer.

Visual Resources

- Same mitigation measures as described under Alternative IV.

Overnight Accommodations

- Overnight accommodations will be considered only after a thorough study is completed by the permittee. The study will be conducted by a qualified independent party and follow established guidelines. An environmental analysis will be conducted at the permittee's expense to analyze and document their findings.

Modifications to Alternative V

Variations of Alternative V (identical to those described under Alternative IVC and IVD) were also considered but deleted from further study. The team wanted to retain Alternative V as originally proposed by the Willamette Pass Ski Corporation and felt that these variations were adequately addressed under Alternative IV.

ALTERNATIVE VI: Maximum Development

Alternative VI is the maximum development alternative. Facilities include all alternative ski lifts and structures proposed by Willamette Pass Ski Corporation in the 1983 Phase II Plan and during subsequent communications (see Map 8).

Area Involved: 1,100 acres

Capacity: 6,694 people at one time (PAOT); 5,690 skiers at one time (SAOT)

Facilities: Existing and planned facilities, described in the No Action - Phase I Only alternative, would be augmented by the following improvements:

- Restaurant, restroom, and water capacity in day lodge increased to serve 4,517 additional PAOT.
- Triple chairs D, E, F installed as described under Willamette Pass proposal Alternative V.
- Triple chair (G) installed from Duck Soup to 6,650-foot level of West Peak (capacity 473 SAOT).
- Triple chair (H) installed parallel to Summit Chair (A1) to the 6,700-foot level of Eagle Peak (capacity 1,284 SAOT).
- Twenty-seven new runs constructed which would add 27 acres for beginner, 82 acres for intermediate, and 11 acres for advanced skiers.
- An additional 93 acres of runs would be above the 5,500-foot level, 170 acres of runs would be on north facing slopes.

- Summit Lodge, restrooms, water, and sewage systems constructed for 426 people on saddle southeast of West Peak.

cover should be adequate to cover stumps.

Water

- One-mile access road constructed to Summit Lodge. A 2.5-mile access road around West Peak will serve as catchline for lost skiers; 0.25-mile access road built to top of D lift.
- Nordic center installed, 2.5-mile groomed cross-country ski trail constructed west of base area, and 2.5 miles along catchline road.
- Overnight accommodations (30 units) constructed in Sleepy Hollow.
- Parking lot expanded to 18.3 acres (including 4 additional acres in Sleepy Hollow) to accommodate 1,883 cars and 22 buses.

- The permittee will be required to follow safe transporting practices, sound construction methods for diesel storage tanks, conduct regular monitoring (using early warning systems and/or area-wide surveillance methods), provide an effective hazard spill contingency plan and other measures designed to prevent spills.
- As part of the Special Use Permit requirements, the permittee will submit detailed, on-site, sewage disposal plans for the Summit Lodge to the Forest Service and appropriate state and county departments. Prior to construction, permits for sewage disposal must be obtained from D.E.Q.

MITIGATION MEASURES FOR ALTERNATIVE VI

In addition to the general mitigation methods that apply to all alternatives, the following will apply:

Soils

- Same mitigation measures as described in Alternative II.
- To protect the more nutrient-rich duff layer, stump removal on ski runs prohibited on north slopes. Snow

Recreation

- Provide nordic skiers access from Maiden Peak Saddle to Skyline Creek.

Visual

- Feather runs with islands and natural openings to make visual appearance more natural.

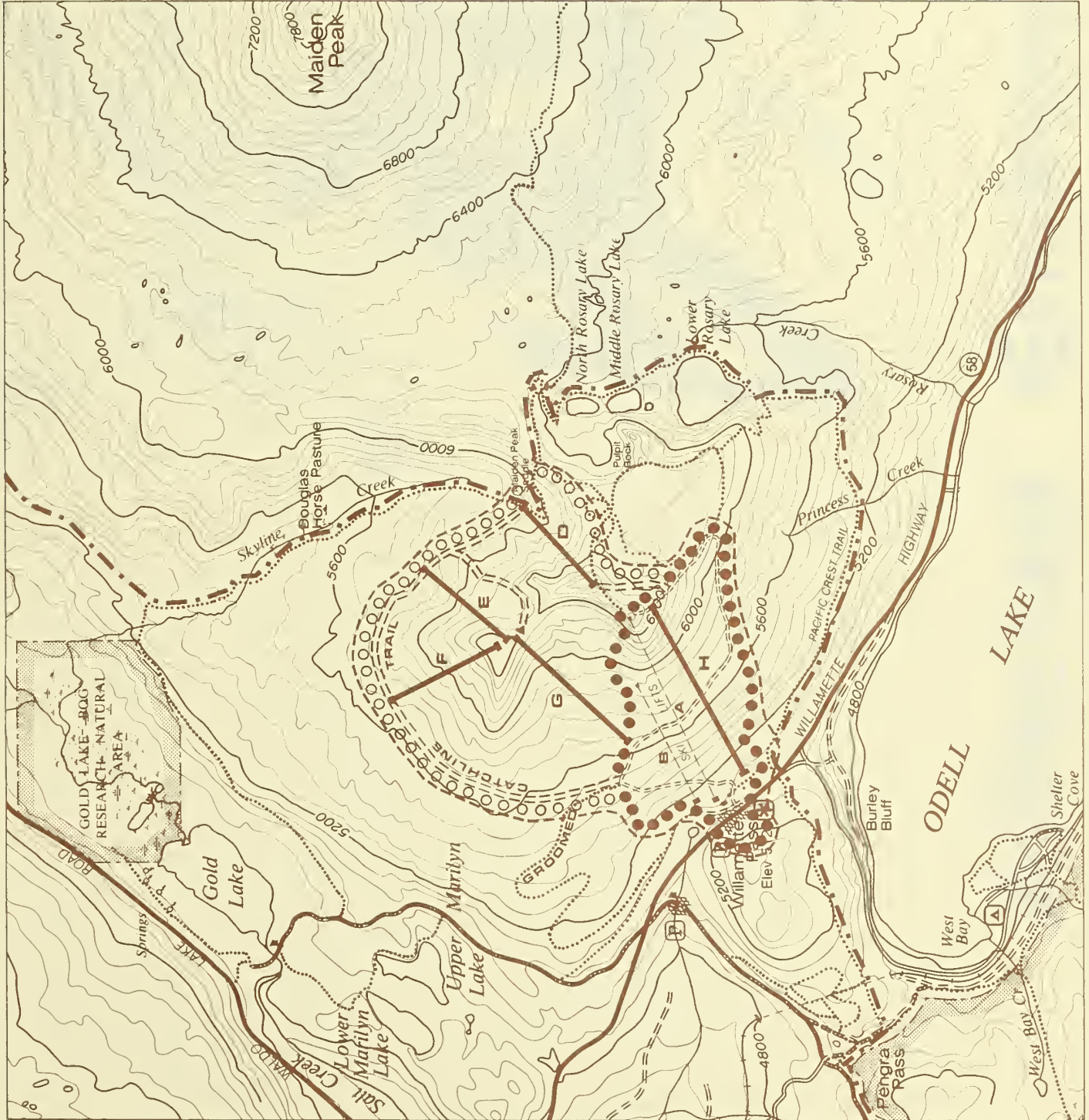
Overnight Accommodations

- Same mitigation measure as described under Alternative V.



LEGEND

- Study Area Boundary
- Permit Area Boundary
- Alternative Boundary
- Ski Lift
- Proposed Ski Lift
- Proposed Access Road
- Nordic Ski Trail
- Pacific Crest Trail
- Proposed Summit Lodge Location



ALTERNATIVE VI (MAXIMUM DEVELOPMENT)

Affected Environment



III. AFFECTED ENVIRONMENT

A general description of the physical and biological environment of the Salt Creek drainage is included in the Willamette National Forest Multiple-Use Land Management FEIS. A more detailed description specific to the study area is included below.

A. LOCATION

Willamette Pass area is located on the Oakridge Ranger District of the Willamette National Forest and the Crescent Ranger District of the Deschutes National Forest. Legal description is Section 5, 6, 7, and 8, T23S., R6E. The area lies at the crest of the Cascade Mountains, at an elevation range of 5,126-6,700 feet. The ski area is 70 miles southeast of Eugene. It is the closest ski area to Eugene-Springfield area and is directly accessible from Highway 58, a major cross-state route (Maps 1 and 2).

B. PHYSICAL ENVIRONMENT

1. Climate - Weather conditions at Willamette Pass Ski Area are typical of the western slopes of the Cascades. At these elevations, precipitation, temperature, wind, and vegetation all influence snow depth and quality, and the ski area's length of operation.

2. Air Quality - The study area is designated by the Lane Regional Air Pollution Authority (LRAPA) as a Class II air quality area for indirect sources of air pollution. Air quality is relatively high due to the low level of development in the area and excellent west-east circulation. Marine airflow off the Pacific generally clears any pollutants from the Willamette Pass area. Sources of air pollution in area are dust, vehicle

emissions, and smoke from logging slash disposal.

The Diamond Peak Wilderness Area located two miles to the south is classified as a Class I area. A third area of concern is the Eugene-Springfield vicinity which is classified as a nonattainment area by the LRAPA.

3. Precipitation and Temperature - The annual precipitation is approximately 70 inches, the majority of it falling between mid-October and mid-April. Summers are generally cool, clear, and dry. Mean temperatures range from a low of about 18 degrees F. in late January to a high of about 77 degrees F. in mid-July. Minimum temperatures during January and the first half of February usually fall below 20 degrees F. Typically, years with poor or inadequate snow accumulation result from higher than average temperatures rather than less than average precipitation. During any 24-hour period, winter temperatures can vary as much as 20 degrees F. or more.

4. Wind - Most of the present ski terrain of the Willamette Pass faces southwest so it receives the full force of the southerly winter winds. Southwesterly winds can also bring warm air and rain during the winter months. There is less wind exposure on the north side of the study area due to the blocking effect of the ridge extending northwest from Eagle Peak. Eastern exposures are subject to occasional strong easterly winds bearing cold and dry winter air. White-outs occur but are not as common as in ski areas at higher elevations.

5. Aspect and Exposure - Slope aspect is an important management planning consideration as it relates to exposure from wind and the sun's radiation which directly effects snow quality and quantity or skiability. Northerly exposures have a greater ability to retain snow longer than do areas exposed to more direct solar radiation to the south. This is particularly important for spring skiing in that the snow remains firm on sunny days unlike the soft and mushy snow conditions present on south facing slopes.

6. Snowfall: Quantity and Quality - Because of differences in elevation and aspect, snow accumulation varies significantly within the study area. This is also true of the moisture content of the snow which is an important factor in its skiability.

Snow records for nearby Cascade Summit, elevation 4,880, from 1929-1981 show an average annual snow depth for January 1 of 40.5 inches and for February 1 of 60 inches. Snow data collected by the Soil Conservation Service (available for review at the Oakridge Ranger Station) at two sites north of the study area at 5,600 feet and 5,760 feet show average snow depths for February 1 of 80 to 90 inches.

On the base area at 5100 feet, the snowpack begins to accumulate from late November to early December. Generally, there has been adequate snow for skiing at Willamette Pass from mid-December to the end of March.

On the north side of the study area at the 5700 foot level, snow accumulation begins in late October to early November. By mid-winter, snow records indicate the north

side at the 5700 foot level can have twice the snowpack as the existing base area.

There have been several years of poor snow conditions. During the 1976-77 season, there was insufficient snow for operation. The 1980-81 season was also poor with only 6 weekends of adequate snow accumulation to run all lifts. The last three winters were very good with sufficient snow to operate from mid-December to the end of April. Based on 50 years of snow data, it is projected that three out of ten years may experience insufficient or marginal snow conditions at the base area during the critical Christmas holiday season.

In 1981, the Forest Service sponsored an independent study to examine the feasibility of snow making at Willamette Pass. The ski area consultants (Blue Enterprises, Inc., 1981) concluded that snow making was indeed a viable option at the Pass. In the 1982 decision on Phase I development, the Forest Supervisor approved snow making as an alternative in years with poor snow conditions.

Since 1981, new techniques have been developed to improve snow conditions. The Willamette Pass Ski Corporation now believes that snow making at the Pass is not economically feasible and prefers to use "snow grooming" or "farming" techniques. This latter method retains snow by removing air and keeping a high moisture content. It simulates natural compaction produced by a period of snow accumulation followed by rain.

Because snow grooming permits utilization of existing snow, it is preferred to snow making in the Willamette Pass area.

Snow grooming involves the compacting, blading and tilling of snow surface by a snowcat with snow manicuring attachments. At least 2 feet of snow is required before a track is packed.

Snow compaction helps to retain snow and permit skiing on a moderate accumulation of snow. In areas subject to windscour, snow fences are used to control snow deposition. Currently, Willamette Pass accomplishes their grooming with two diesel-powered piston bully snowcats.

Frequency of grooming depends on snow conditions and amount of use on particular runs. Normally, most ski areas compact their popular runs after every snowfall. Tilling and blading is done when runs become icy or mogully. The environmental consequences from snow grooming includes: noise and engine emissions in the immediate area of operation, retention of snowpack longer because snow is retained longer on slopes. This could have the effect of slowing growth of underlying vegetation in the spring and early summer and reduce maximum spring runoff in water drainages in the immediate area.

7. Avalanche Hazard - Avalanches generally occur on moderately steep, open slopes and are influenced by weather, snow conditions, and vegetation as shown on Map 9. Presently there are three areas accessed by the summit chair which have a low to moderate hazard. These areas are controlled by the area Ski Patrol and are

off-limit to the public during times of avalanche danger. Most of these avalanche paths have starting zones dispersed along the ridge stretching between Eagle and West Peaks. Large cornices develop and build up on the northeast side of this ridge because of strong southwest winds.

8. Minerals

The potential for mineralization in or around the Willamette Pass study area is very low. The area is characterized by volcanic deposits of andesites, basalts, breccias, etc. overlain by glacial till and/or pumice. Our records indicate that there are no mineral leases or applications, nor mining claims currently located in or near the proposed expansion area. No mineral activity is anticipated in the future.

The Willamette Pass rock quarry is located adjacent to the permittee's parking lot south of Highway 58. The rock pit contains 250,000 cubic yards of rock in place. This would be equivalent to 333,000 cubic yards of crushed rock. At a price of \$6.25 per yard, the value of the crushed rock equals roughly \$2.1 million.

9. Topography and Soils

The southwest slopes rise from the Willamette Pass base of 5,120 feet to 6,600 feet at Eagle Peak Summit and range from 15% to 90% slope. The rise of the northeast slopes ranges from 5,800 feet to 6,700 feet along the ridge extending northwest from Eagle Peak and range from 15% to 60% slope.

The Cascade Formation is characterized by a mixture of bedrock compositions including andesites, basalts, and volcanic breccias. The bedrock is overlain by glacial till and/or deposits of pumice and ash.

Generally, the southwest slopes are characterized by deeper soils (Map 10). On the majority of slopes, soils range from 3 to greater than 8 feet deep; in some areas soils are less than 3 feet deep. The northeast slopes are generally characterized by a higher proportion of shallower soils up to 3 feet deep with more visible rock outcrop; in certain areas soils are deeper and range from 3 to 6 feet deep. The shallower soils (up to 3 feet thick) consist of pumice and ash over bedrock. The other soils have surface soils of pumice and ash (from 2 to 4 feet thick) and subsoils of gravelly sandy loam (from 1 to greater than 4 feet thick). The pumice and ash soils are characterized by very rapid to rapid permeability rates, moderate to very severe erosion potential, and low fertility. For more information on soil characteristics and interpretation, refer to the Willamette Pass Ski Area Master Plan 1983 or the Soil Resource Inventories for either the Willamette or Deschutes National Forests.

10. Water Resources - The southwest portion of the permit area includes two small ponds less than 2 acres in size, which are located just south of the day lodge. The smaller pond drains east into a small Class IV intermittent stream (defined in Appendix A), Sleepy Hollow Creek, which eventually enters Odell Lake. The larger pond drains to the west into a

Class IV stream, which is a tributary of Salt Creek (Class I). The present water system for the ski area is a well 44 feet deep with an 8-inch casing. Capacity of the well is 1,800 gallons/hour. The well is located under the pumphouse/electrical service building. Water resources in the study area are shown on Map 11.

The northeast portion of the permit area drains into Skyline Creek (Class III), through a small Class IV tributary. A wetland known as Douglas Horse Pasture is located approximately one half mile from the permit area along Skyline Creek. Skyline Creek becomes a Class II stream prior to entering Salt Creek (Class I) at the Gold Lake Bog Research Natural Area. Salt Creek drains into Gold Lake before flowing on down the drainage.

11. Fire - The potential for wildfire is low as use will primarily be in the winter. The fuels in the area have a low rate of spread and low resistance to control. Access is by paved highway across a dirt road accessing the double chairlift.

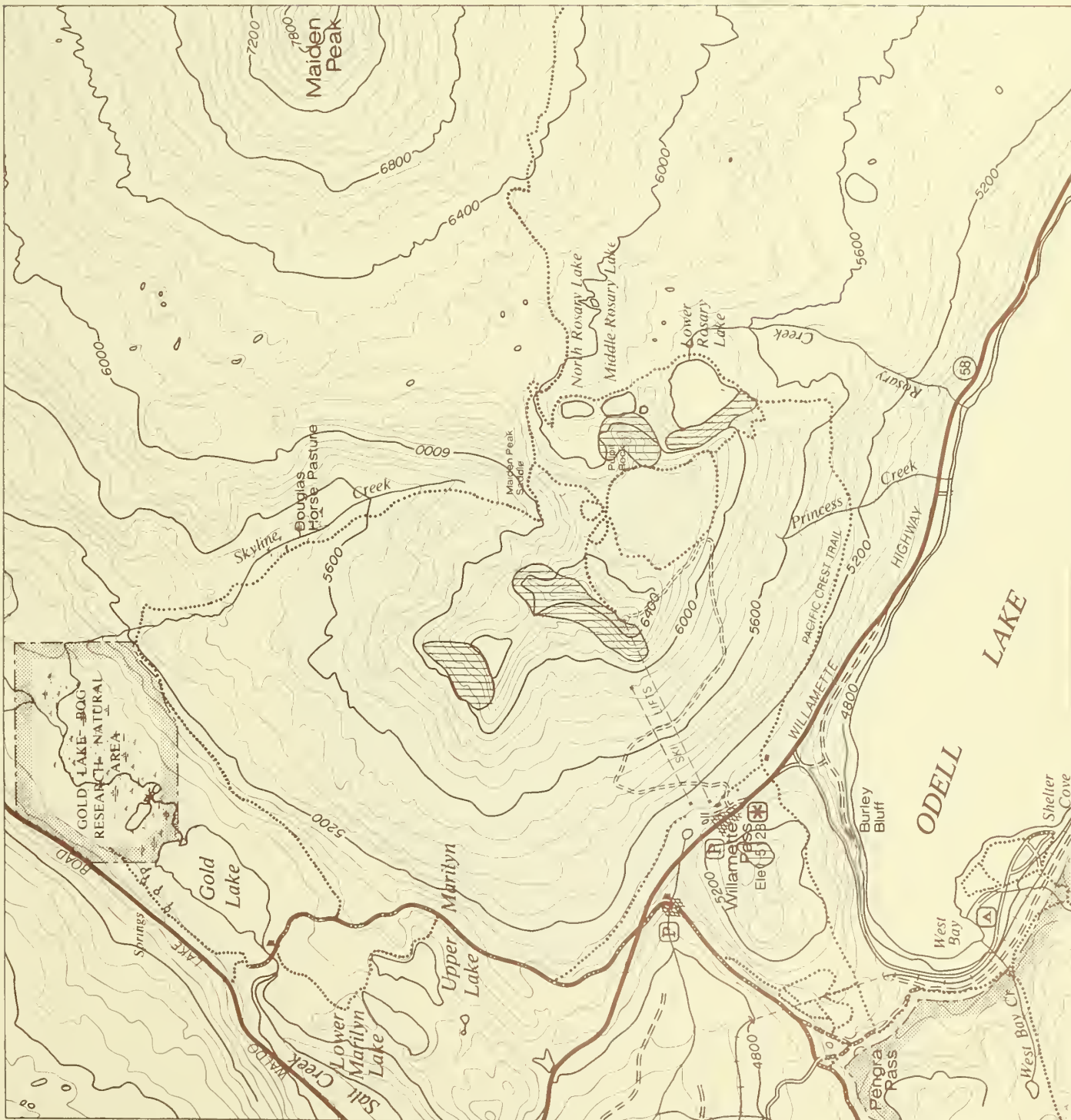
C. BIOLOGICAL ENVIRONMENT

1. Wildlife - The project area is used as summer range by Roosevelt elk, blacktailed deer, and probably mule deer. Winter range for these animals is located in the headwaters of Salt and Salmon Creeks. Deer and particularly elk are commonly observed in the existing ski area during spring and summer. Ski area personnel report that elk often cross the main "By George" run on the bench near the intermediate off-load. Some travel occurs along the ridgelines north



LEGEND

Areas of Avalanche Hazard Potential.

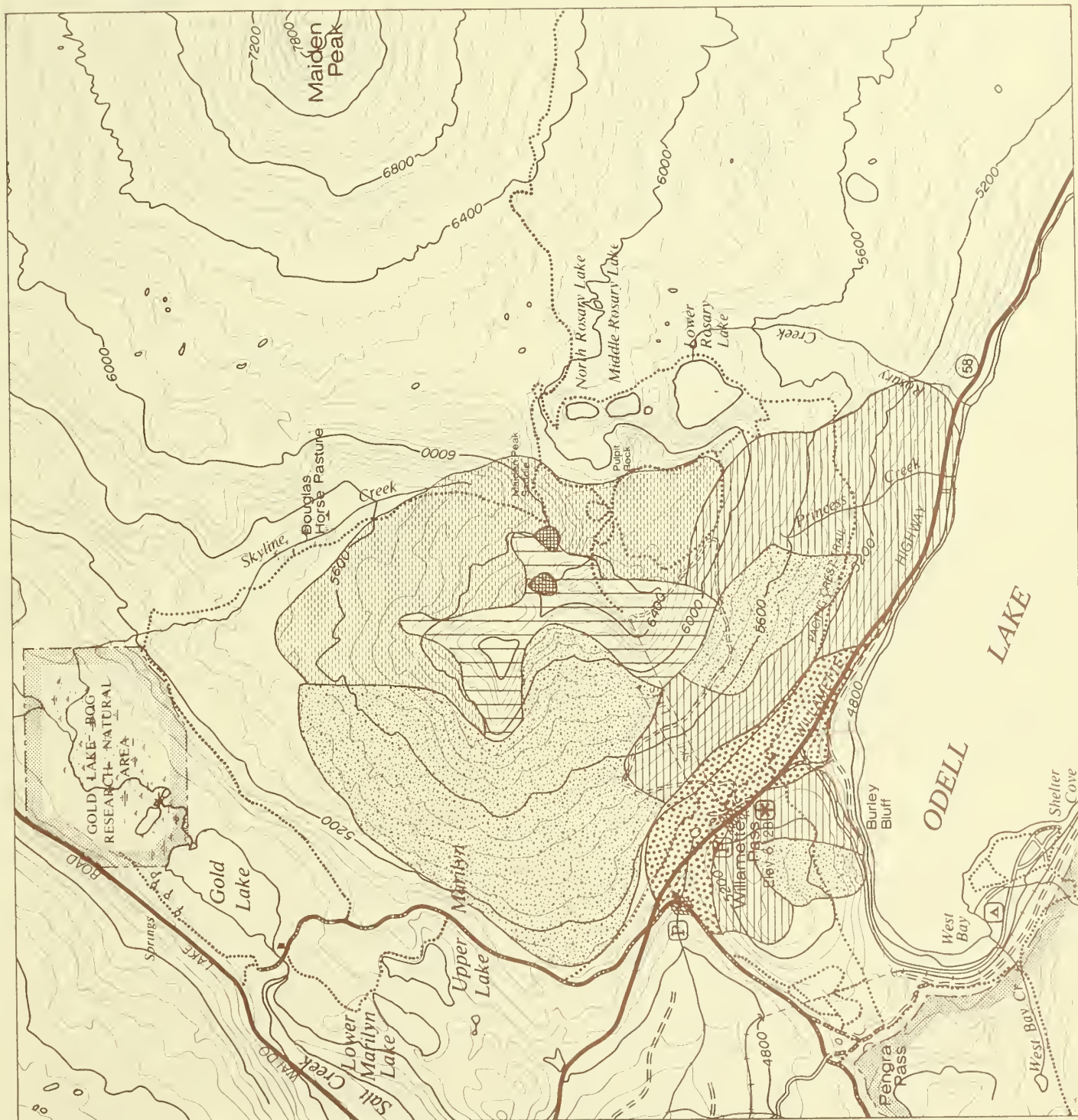


AVALANCHE HAZARD



LEGEND

- Rock Outcrop.
- Shallow Pumice And Ash Soils And Rock Outcrops on Steep Slopes.
- Moderately Deep Pumice And Ash Soils on Gentle Slopes.
- Moderately Deep And Shallow Pumice And Ash Soils on Moderately Steep to Gentle Slopes.
- Moderately Deep Pumice And Ash Soils on Moderately Steep Slopes.
- Deep Pumice And Ash Soils.

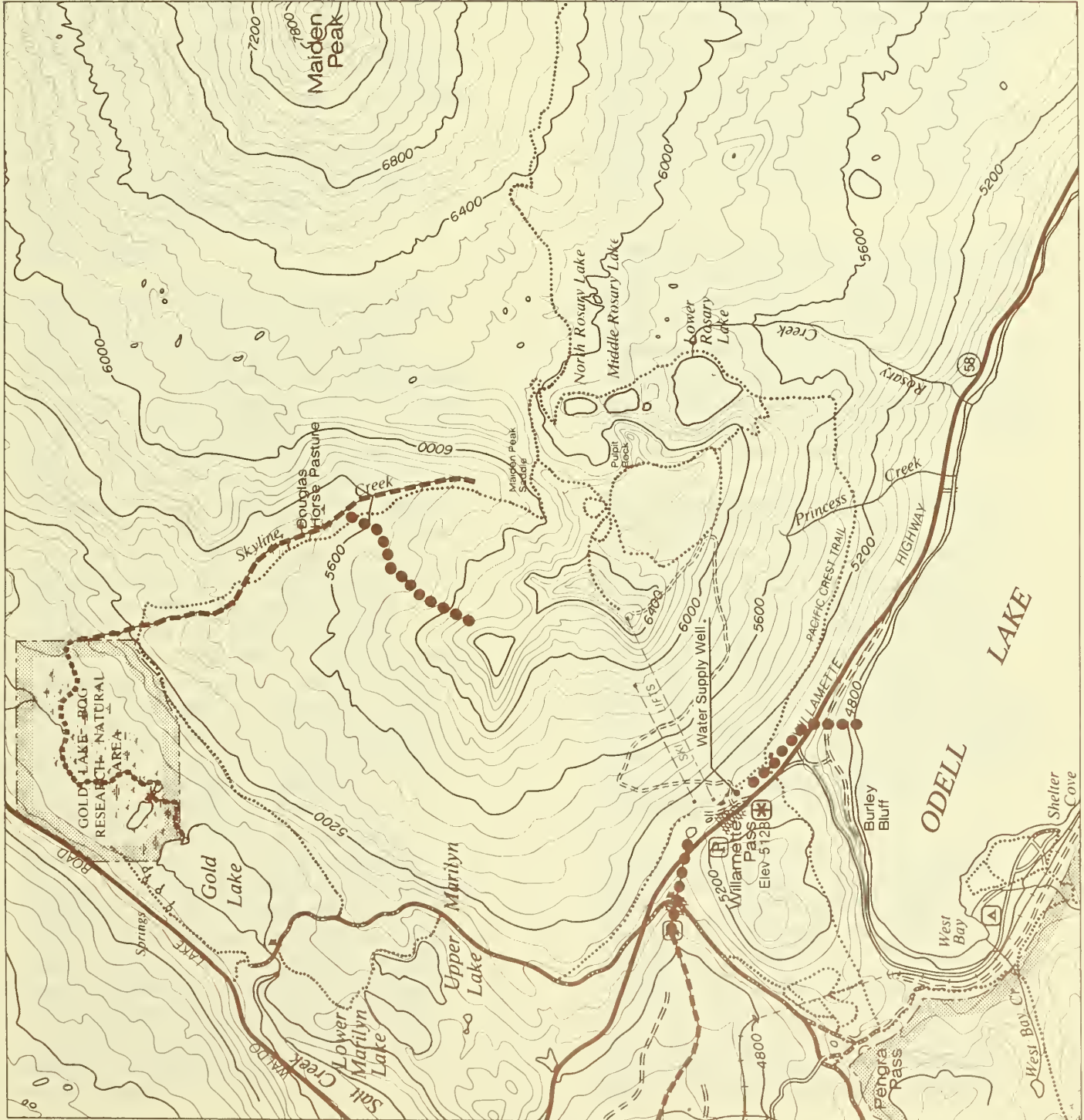


SOIL RESOURCES



LEGEND

Stream Class :



WATER
RESOURCES

and west of Eagle Peak summit, but use above 6,000 foot elevation appears to be limited primarily to spring and early summer.

Three species of furbearers are likely to use the area of the proposed ski area expansion. These are the wolverine, the fisher and the marten. Of these, the wolverine is considered threatened by the Oregon Department of Fish and Wildlife (ODFW), and the fisher is considered to be rare. All are classed to varying degrees as "wilderness-oriented" animals, with the wolverine exhibiting the most stringent habitat requirements.

The wolverine was believed to be completely destroyed in Oregon by the mid-twentieth century; however, the species was confirmed by a hunter-kill north of the Three Sisters in the mid-sixties. Since then, more than 60 sightings and discoveries of sign have been noted throughout the Cascades and parts of the Blue Mountains. According to data provided by Oregon Department of Fish and Wildlife, there has been wolverine sign located by a reliable trapper within 2 to 6 miles of the proposed expansion during the early 1980's. Donald Utzinger of Portland State University, who is initiating an inventory of wolverines and their habitat in Oregon, reports wolverine tracks in the winter of 1984 in the Gold Lake area. The wolverine is a wide-ranging animal (yearly movements in Montana average 150 to 160 square miles) with considerable overlap between individuals. It is probable that the Willamette Pass Ski Area and the proposed expansion comprises a portion of the territory of at least one and possibly two wolverines.

Available literature suggests the wolverine may be intolerant of human activities. Substantial documentation also exists to indicate that the animal can adapt to human intrusion by raiding unattended dwellings and traplines for food. In all instances, the wolverine appears to be related to the presence of large and stable herbivore populations which they exploit as a food source. Rather than preying directly on these animals, the wolverine is uniquely adapted to locate and utilize carrion, the carcasses of big game animals.

Signs of the fisher have been noted by trappers in the Willamette Pass area in the early 1980's at Gold Lake, Davis Lake, and north of Diamond Peak. Their home range is 10 square miles or less, and they are oriented to coniferous forest and riparian situations. They tend to avoid areas without cover.

The requirements of the marten are similar to the fisher. They are oriented to mature timber, preferring a 40 to 60% canopy closure, and avoiding areas with less than 30% closure. They are solitary, mostly nocturnal, and active year-round. Their prey base is oriented to rodents found in or at the edge of mature timber, such as redbacked voles, Douglas squirrels, flying squirrels, snowshoe hares, and pikas.

Marten are intolerant of large-scale openings of the timber canopy. Their habitat can be improved, however, by small, scattered clearcuts. Slash piles, stumps, and down logs provide them with an increased prey base, as well as high quality den sites and travel corridors. Trapping data from ODFW indicates marten

are present from the Rosary Lakes west into the existing Willamette Pass Ski Area. There are also abundant trap records from the Gold Lake area, North Waldo, Fuji Meadows, and south of Odell Lake.

The project area is also inhabited by high elevation birds and animals such as Clark's, nutcracker, grey jay, downy woodpecker, mountain chickadee, common raven, gopher, and chipmunks.

Threatened, Endangered and Sensitive Animals

There is a spotted owl management area (SOMA) west of the expansion area. The nest grove for this pair of birds is believed to be west of Gold Lake. Owl habitat adjacent to the proposed expansion is sub-optimal, characterized by sparse open-crowned stands of true fir and lodgepole pine. A map of this SOMA is available at the Oakridge Ranger District.

The only federally threatened or endangered species using the vicinity are the bald eagle and possibly the peregrine falcon. Bald eagle use is common around the high Cascade lakes, and has been documented around Odell and Gold Lakes. There are historical records of at least three nests at Odell Lake, and foraging by eagles can be expected at any of the Cascade lakes. Use should be monitored on a continuing basis.

There are no known records of foraging or nesting by peregrine falcons near Willamette Pass in recent times. Nesting would be unlikely due to a dearth of cliff habitat with the requisite horizontal ledges.

Additional information on wildlife is included in the Wildlife Assessment in Appendix C.

2. Fisheries - Gold Lake and Gold Lake Bog have naturally reproducing brook and rainbow trout populations. Although these areas have been stocked infrequently in the past, they are no longer supplemented by the Oregon Department of Fish and Wildlife (ODFW).

Historically, rainbow trout have been known to spawn in the streams going into Gold Lake and the Bog as well as the outlet from Gold Lake. Currently, it is known that the rainbow trout spawn in the outlet of Gold Lake during the spring and the brook trout spawn during the late fall in the inlet to Gold Lake.

As mentioned in the water resource discussion, Skyline Creek and Salt Creek are the main streamcourses flowing into Gold Lake and Gold Lake Bog.

Although the Forest Service manages the habitat of Gold Lake, the ODFW manages the fisheries resource. As stated in their Gold Lake Management Plan (draft, 1985), ODFW's major objectives for managing Gold Lake are: 1) Manage for self-sustaining rainbow and brook trout populations, 2) emphasis will be placed on providing anglers with trout of preferred species, abundance and size and 3) encourage Forest Service to retain current level of access and public facilities at Gold Lake.

3. Vegetation - The dominant timber types on both the southwest and northwest slopes are mountain hemlock and Pacific silver fir mixed with western white pine,

lodgepole pine, noble fir, and Douglas-fir. The stand is mature with trees often exceeding 21 inches in diameter. Defect will run from 20 to 25%. Net volume per acre on existing adjacent clearcut units is about 25 thousand board feet (MBF). Regeneration is occurring naturally in numerous small openings throughout the area. Laminated root rot pockets are prevalent throughout the stand.

The groundcover is typically dwarf huckleberry, sedge, beargrass, snowbrush, occasional manzanita on dry south-facing slopes, pine grasses, and some introduced grasses along existing runs. The ground cover of the numerous small openings is often sedges, beargrass, and other forbs and grass-like vegetation. The distinguishing differences between the north and south slopes are less dense groundcover and understory, more openings on the upper north slopes and more marshy areas on the lower north slopes. The vegetation of the marsh areas along Skyline Creek includes willow, sedges, rushes, and big huckleberry.

4. Sensitive Plants

No sensitive, rare, threatened, or endangered plants were located or identified during preliminary reconnaissance of the project area. Although special habitat types do occur in and near the proposed ski development and trail relocation areas, no sensitive plant species have been documented to date in the immediate area of expansion. A detailed discussion of the sensitive plant inventory, special habitat types and potential sensitive species is included in Appendix-F.

5. Gold Lake Bog Research Natural Area

The Gold Lake Bog Research Natural Area is located one mile north of the study area boundary (Map 11). The Research Natural Area was established August 10, 1965, to preserve some prime subalpine bogs and several species of sensitive plants. It provides a refuge for protection of six uncommon species of bog plants; including sphagnum moss and five species of carnivorous plants, and a site for studying the environment (habitat) and breeding relationships of two species of frogs. For more detailed information, refer to "Federal Resource Natural Areas in Oregon and Washington - A Guide Book for Scientist and Educators," 1972, Pacific NW Forest and Range Experiment Station, Portland, Oregon.

There are no known federally listed threatened or endangered species in the proposed permit area or in the Gold Lake Bog Research Natural Area.

D. SOCIAL AND ECONOMIC ENVIRONMENT

1. Current Resource Management - The existing Willamette Pass Ski Area (400 acres) is designated in the Waldo Recreation Area allocation as a developed winter sports site in the current Willamette National Forest Land Use Plan Final Environmental Impact Statement. Facilities may include ski lifts, restaurant, restrooms, and other facilities approved by the Forest Service in long-range development plans.

Programmed timber harvest is not permitted. Timber salvage and other timber management activities

may be designated to meet ski area development needs such as clearing for runs or chairlifts.

Maiden Peak and vicinity (including the remaining 700 acres in the 1,100-acre project area) have been allocated to a potential winter sports study area. In accordance with the Willamette Land Management Plan, future development in this area will depend on Forest as well as Regional priorities. These include, in priority order:

- a. Utilizing existing permitted developed winter sports areas.
- b. Expanding existing areas.
- c. Providing new developed winter sports areas.
- d. Providing snow play areas in conjunction with developed winter sports areas where possible.

This study is designed to address the above priorities.

In general, the potential winter sports area will be managed for undeveloped recreational opportunities. Timber production is not an objective in this area. Facilities may be developed to protect resources, provide for safety and sanitation, and enhance use opportunities. These facilities may include trails, campsites, potable water sources, toilets, fire-rings, tables, and shelters.

The existing ski area is administered under two separate Special Use Permits. A 20-year term permit covers the 25 acres in the base area. The day lodge, maintenance building, ski patrol/ski school building and lift terminals are included in

this permit. A terminable or annual Special Use Permit covers the remaining area and incorporates the ski runs and slopes.

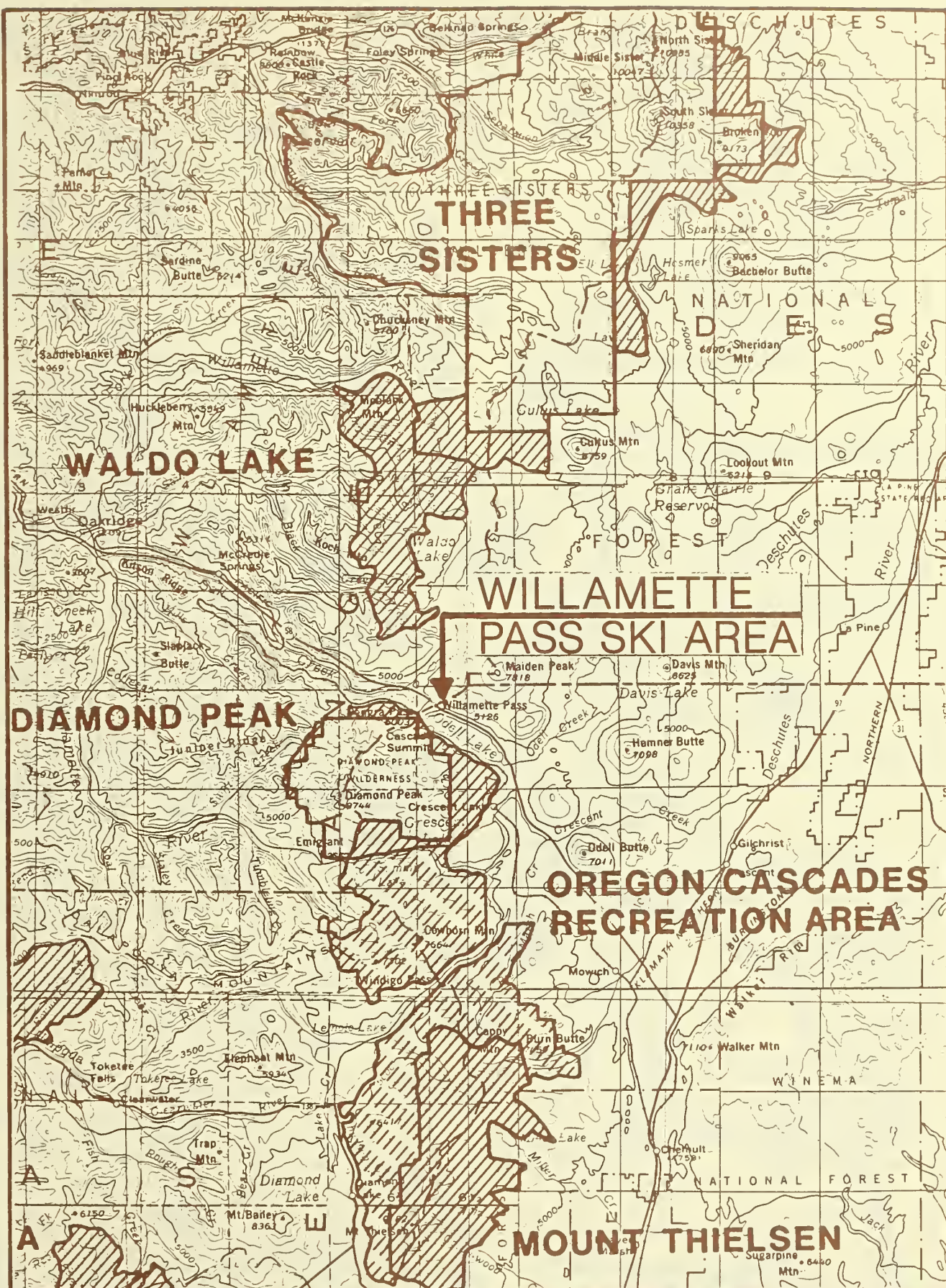
2. Recreation




Summer Use - Summer opportunities for developed and dispersed recreation in the Willamette Pass area are extensive (see Maps 12 and 13). Nearby Odell and Gold Lakes are very popular fishing lakes.

Approximately 111,000 recreation visitor-use days occurred at developed sites on these lakes during the 1984 season. Odell Lake has 4 developed campgrounds, 65 summer homes, and 2 resorts, with a combined capacity of 1,817 people at one time (PAOT). Odell Lake Lodge, at the east end, is open year-round. Gold Lake, one mile west of the study area, is a fly fishing only area with its own campground, adjoining picnic area, and boat ramp.

Waldo Lake, elevation 5,414 feet, lies just five air miles north of the study area. Its crystal-clear water covers more than 10 square miles and it is considered by scientists as one of three purest lakes in the world. There are three well-developed campgrounds on the Lake's east shore, with more than 200 camping units.

Waldo Lake is flanked on its west and north shores by the newly created 37,187-acre Waldo Wilderness. More than 80 miles of maintained trails lead to numerous high-country lakes within the Wilderness. Use in the Waldo area is light compared to other areas of comparable beauty and diverse recreation opportunities.



-  EXISTING WILDERNESS
-  1984 ADDITIONS
-  SPECIAL RECREATION AREA ADDITIONS 1984

LEGEND

0 4 8 mi.



RECREATION RESOURCES

PERSPECTIVE PLOT VIEWPOINTS



This is mainly due to a high mosquito population during July and the first half of August. Visitor-use days for the Waldo Area for the summer of 1984 were about 72,000.

In addition to the Congressional designated areas, a large tract of undeveloped land area (over 36,000 acres) occurs immediately north of the study area. With the exception of Bobby Lake, which is a popular fishing lake with easy access from the Waldo Road, the area receives light use by dispersed recreationists. Based on observations of recreation specialists it is estimated that 100 people hike to Maiden Peak each summer.

These undeveloped areas are included in the Waldo Recreation allocation in the current Willamette Land Use Plan. These areas will be considered for a wide range of multiple uses in the upcoming plan scheduled to be out for public review the fall of 1985.

Other Congressional designated Wilderness or other recreation areas near Willamette Pass include the Three Sisters Wilderness (16 miles north), Diamond Peak Wilderness (2 miles south), Mt. Thielsen Wilderness (20 miles south), and the Oregon Cascades Recreation Area (8 miles south) as shown in Map 12.

Winter Recreation - Developed in 1939, Willamette Pass was the first operating ski area in the Central Cascades. Only Timberline Lodge on Mt. Hood has a longer operating history in the State. Since its beginning, the ski area has been characterized as a "pitch-in-and-help" family area.

Interest continued to grow at Willamette Pass through the 1960's; but in the 1970's, there was a decline in winter visits as a tendency grew for skiers to go to more developed areas. While most ski areas in Oregon offered at least three chairlifts, Willamette Pass offered only a poma lift and two rope tows.

In 1982, a plan calling for a double chairlift to the 6,700-foot summit and eight new ski runs was implemented for the 1982-83 ski season. With the addition of the new mile-long chairlift, the use trend significantly reversed. In the summer of 1983, a second chair was built along with a new day lodge and four additional runs. The winter of 1983-84 showed an increase of 80% skier visits over the previous winter.

Recreation use at Willamette for the 1983-84 season included about 50,000 downhill skier visits, 8,000 cross-country skier visits, and approximately 5,000 snowplay and spectators, etc.

The area's present capacity to serve alpine skiers is about 2,000 people at one time. Willamette Pass is oriented to families, school groups, school racing teams, and, generally, the beginner/intermediate skier. The upper hill is gaining in popularity with advanced skiers.

An unsupervised snowplay area in the gravel quarry across the highway from Willamette Pass's Base Area is very popular with tubers and sledgers. During the 1983-84 season, an estimated 5,000 people used the site. Due to the uncontrolled nature of the sport and the irregularities and steepness of the terrain in the

quarry, the frequency of injuries has been unusually high. Serious injuries of the neck, head, and spine have occurred over the years. The area is posted with signs warning users that it is a hazardous area to snowplay.

During the 1983 expansion of the ski area, part of the snowplay area was developed into a parking lot to serve as an overflow area. Building the lot reduced the size of the area for snowplay; however, it provided the snowplay users with a safer parking situation while helping eliminate the parking congestion across the street.

Not including the Willamette Pass parking lot, there are six maintained winter parking areas in the Willamette Pass vicinity with a combined capacity of up to 300 cars.

Dispersed use, mainly cross-country skiing, has been very popular in recent years in the Willamette Pass Area and has shown substantial increases in visits from 1981 to 1984. During this period, skiing visits in the Gold/Midnight Lakes area increased from 3,489 to 15,023 - an average increase of 100% per year.

There are more than 80 miles of maintained cross-country ski trails in the area, many of which are over summer trails and roads. The Pacific Crest National Scenic Trail (PCNST), which crosses the highway at Willamette Pass, attracted an estimated 6,000 skiers during the 1983-84 season. Most skiers made Rosary Lakes their destination. However, skiing the PCNST Loop Route via the Maiden Peak Trail and Gold Lake Trail, coming out at Gold Lake Sno-Park, gained in popularity. This section of the

PCNST trail passes through the northeast corner of the study area. Tait's Trail, a loop system designed for accomplished skiers, lies just east of the study area on the plateau above the Rosary Lake basin. This route, which can be accessed from the PCNST at Maiden Peak Saddle or from the top of the Summit Chair, is gaining in popularity. During the 1983-84 season, use figures indicated that more than 500 skiers used this area.

Located one mile west of the Pass is the Gold Lake Sno-Park. Skiers from this point have unlimited opportunities to ski more than 30 miles of various loop routes that lead to lakes and wilderness destinations. Use at this lot for the 1983-84 season was over 15,000. About half of the skiers using this parking facility made Gold Lake their destination.

Recreation Opportunity Spectrum - (ROS) - The Recreation Opportunity Spectrum is a system for identifying the opportunities for recreation available on a given area of land. Opportunities are defined according to their occurrence on a spectrum or continuum: those associated with much social contact, a heavily modified or unnatural setting, and a great deal of regulatory control are at one extreme called the urban class. Those characterized by solitude, an unmodified environment, and the absence of regulation are at the other extreme, called the primitive class. Seven classes are used to identify points on the spectrum of recreation opportunities. Four ROS classes are involved in the Willamette Pass area, primitive, semiprimitive nonmotorized, roaded natural, and rural.

Primitive - An unmodified, natural environment. Little to no evidence of others within the area. No motorized use. No evidence of restrictions or controls.

Feeling of isolation and self-reliance is extremely likely.

Semiprimitive Non-motorized - A predominately natural-appearing setting. Interaction between users is low, although other users are evident. Minimum on-side controls or restrictions; no motorized use. Feelings of isolation, self reliance, and high challenge or risk are very likely.

Roaded Natural - A moderately natural appearing environment. Moderate evidence of the sights and sounds of others although interaction may be low. Conventional motorized use is common. Resource modification is evident, but in harmony with the natural setting. Challenge and risk opportunities associated with primitive type activities are not very important. Practice of outdoor skills may be important.

Rural - Area is substantially modified from the natural. Resources are modified to enhance specific activities. Sights and sounds of people are evident; interaction is moderate to high. Moderate densities are provided far away from developed sites.

At Willamette Pass, part of the existing area which is served by lifts is identified

as a concentrated recreation experience (classified as roaded natural), while the more crowded, developed areas approach a rural type experience (classified as rural). The back sides of Eagle and West Peaks are used only on occasion by off-trail cross-country skiers. The recreation experience in these areas is semiprimitive (classified as semiprimitive nonmotorized). Adjacent undeveloped areas are classified as primitive.

The existing Recreation Opportunity Spectrum for the study area and vicinity is shown in Map 14.

3. Cultural Resources - No known cultural resource sites have been previously identified for the area. The current National Register of Historic Places has been consulted through Oregon State Historic Preservation Officer in compliance with Section 106 of the National Historic Preservation Act of 1966; there are no registered or eligible sites or properties within the study area. Historic Cascade Forest Maps (CA.1936) indicate that besides the Skyline Trail, Douglas Horse Pasture was present as well as an unnamed way trail between Douglas Horse Pasture and the Marilyn Lakes. In addition, the upper drainage of Skyline Creek, including associated flats, constitute "high probability" areas for encountering archaeological (Native American) sites. Thus a cultural resource inventory based on both probability and opportunistic sampling was designed and implemented by the District archaeologist for all areas are adjacent "high probability" areas

affected by all the alternatives combined. A total of 136 acres were field examined over a three-day period during the 1984 field season. No cultural resources were located during these field examinations. The District archaeologist, in compliance with Section 106 of the National Historic Preservation Act, determined that the project alternatives as proposed will have NO EFFECT on any listed or eligible cultural resources to the National Register. The Willamette Pass Ski Area Cultural Resource Report documenting this inventory and the Determination of Effect are contained in the analysis file for the EIS at Oakridge Ranger District; additional copies of the report and Determination of Effect are on file at the Supervisor's Office, Willamette National Forest.

4. Noise - Noise levels are generally low throughout the year. Noise is most noticeable in the parking lot and base area and west to the highway. Truck traffic and snow blowers on Highway 58 and in the parking lot and diesel generators used to run the lifts are the chief contributors to noise pollution. Ski run grooming equipment also contributes to some noise but this activity is generally done early in the morning.
5. Visual Resources - The study area covers lands in two of the five quality objectives included in the visual management system. This system is based on classification and mapping of the land by different degrees of variety called variety classes, by public concern for scenic quality called sensitivity levels, and by the distance from the viewer. The combination of variety classes, sensitivity

levels, and distance zones determine the visual resource management goals or quality objectives for the land (USDA-FS 1974).

The two visual quality objectives (VQO) are defined as follows. A third VQO, modification, is also defined here for discussion (included in the study area in Chapter IV).

Retention - Management activities are not visually evident.

Partial Retention - Management activities remain visually subordinate to the existing characteristic landscape.

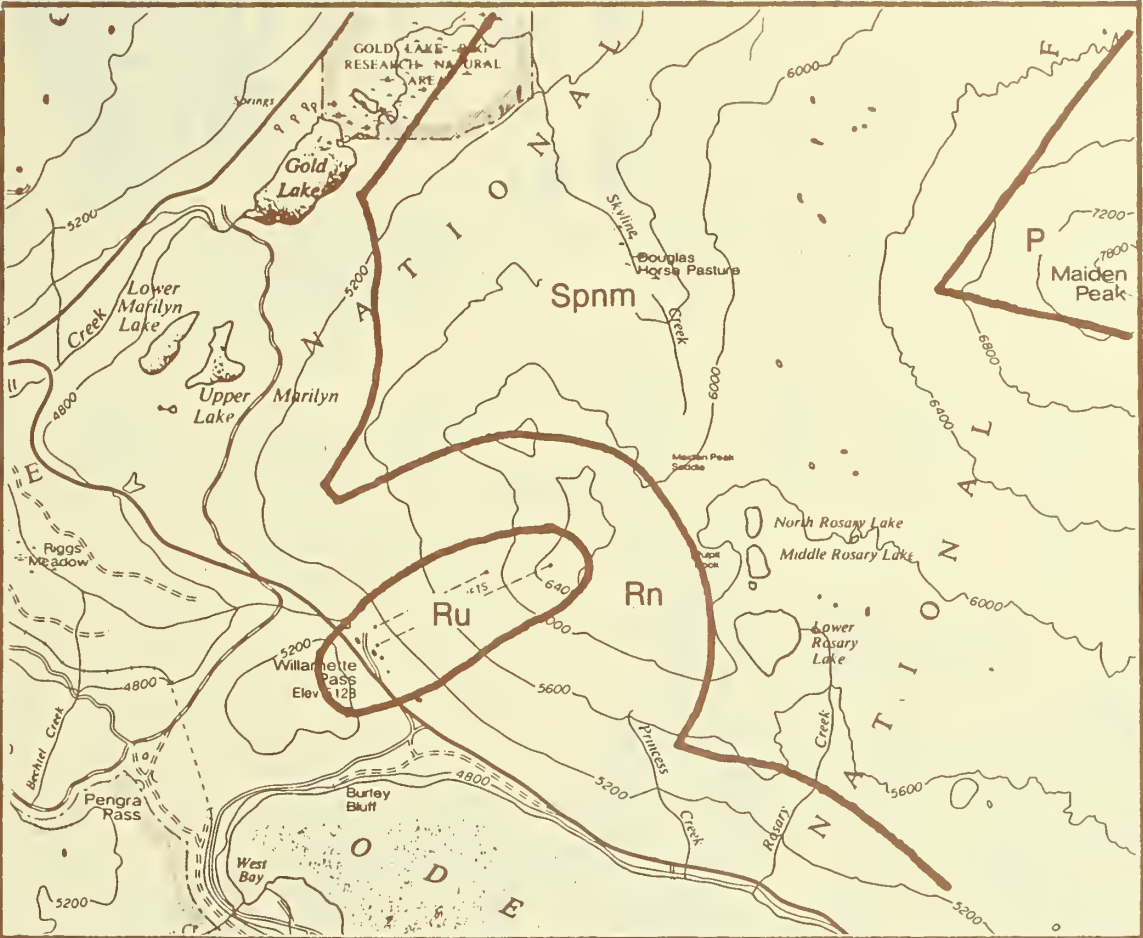
Modification - Management activities may visually dominate the existing landscape. The scale of the activity is consistent with the natural landscape.

The VQO for the study area and surrounding vicinity are indicated on Map 15.

According to the Willamette National Forest Land Use Plan, management activities are required to achieve the highest VQO possible taking into consideration the proposed activity or development.

The characteristic landscape of Willamette Pass area has been altered to accommodate skiing activity within the existing permit area.

An additional visual management concept called Visual Absorption Capability (VAC) has been adopted by the Forest Service. The VAC system measures in relative terms (Low, Moderate, High) the ability of the land to absorb visual change. It also measures ease or difficulty of achieving the VQO and the cost of building roads and structures on specific sites. In general low VAC suggests an area has



LEGEND

- | | |
|------|-------------------------|
| Ru | Rural |
| Rn | Roaded Natural |
| Spnm | Semiprimitive Non-motor |
| P | Primitive |

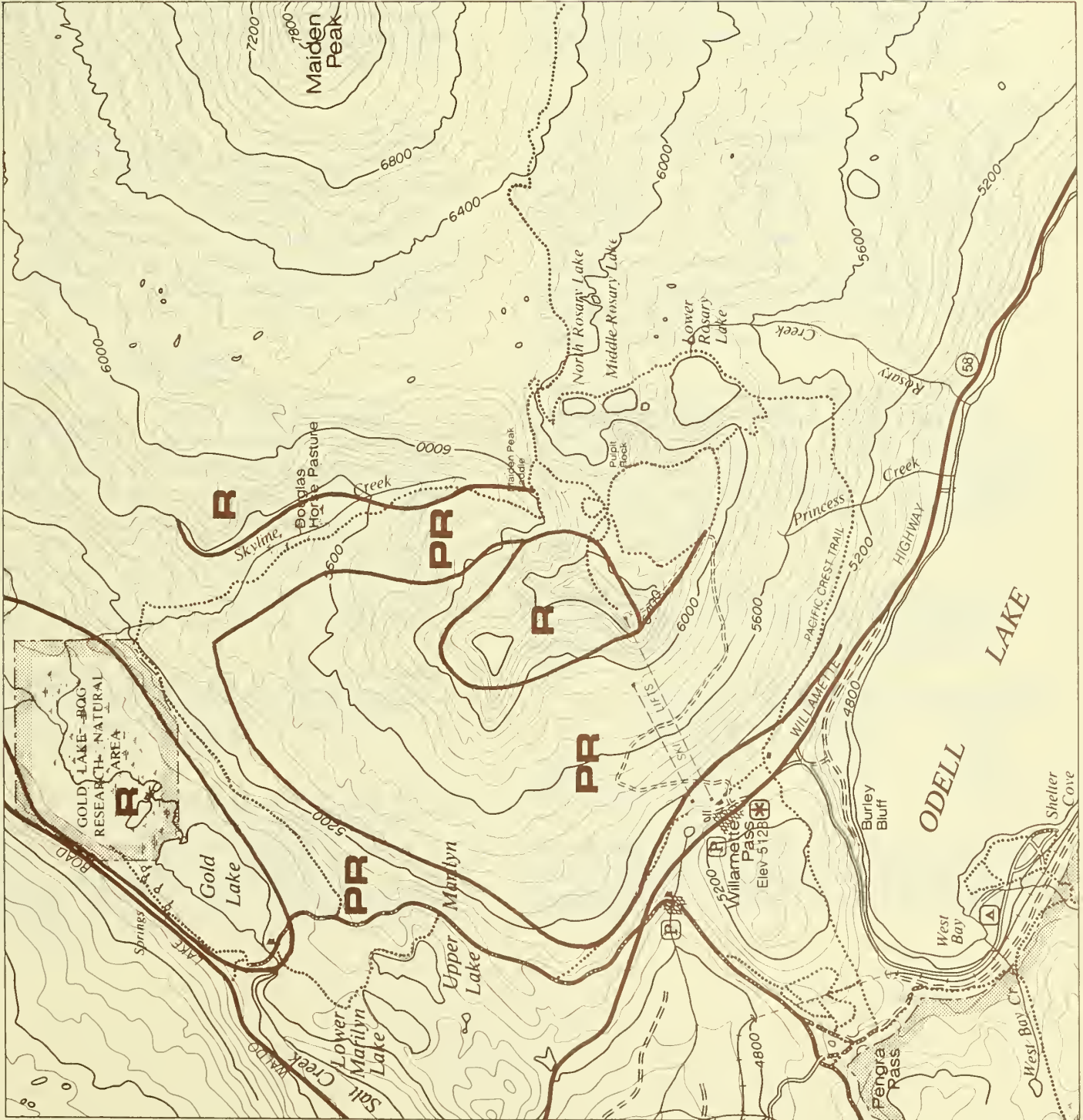
Alternatives I-II
(EXISTING)



LEGEND

R RETENTION
PR PARTIAL RETENTION

(EXISTING)
**VISUAL
QUALITY
OBJECTIVES**



a low ability to withstand visual change; construction costs in these areas will be high in order to achieve the desired result.

The VAC of lands in the study area and surrounding vicinity are shown on Map 16. Note that most of the land is classified as low VAC, which is best suitable for advanced and intermediate runs. Areas with moderate VAC are best suitable for beginner and intermediate runs and base facilities.

6. Transportation - Access to Willamette Pass Ski Area is served by Highway 58. The Highway is a major year-round transportation route, especially for truckers wanting an alternative to Siskiyou Pass in the winter. Traffic counts on Highway 58 average 2,300 vehicles per day.

7. Local Communities

Crescent Lake - The unincorporated communities in the Crescent Lake area are part of the northern Klamath County census division. In 1980, the Crescent Lake area (including Gilchrist, Crescent, and Crescent Lake Junction) had 2,202 people or 0.1% of the State population. The major source of income is timber and minor source is recreation.

Oakridge-Westfir Area - The following information was taken from the Socio-Economic overview of the Willamette National Forest (1984).

The incorporated cities, Oakridge and Westfir, are located approximately 40 miles southeast of Eugene in Lane County. The total population of Oakridge, Westfir, and surrounding area was 5,225 in 1980.

Oakridge has two wood product mills, (currently one is operational) and 28.7% of the employed people in Oakridge work in durable manufacturing, most of this is the local logging companies or mills. Very few people commute to the Eugene-Springfield area. The only other major employer in town is the Forest Service; 9.7% of the Oakridge area's employed residents work in public administration, mostly Forest Service.

Other important employing sections are retail trade and forestry (e.g., reforestation, not logging). The Oakridge area has a much higher proportion of employment in forestry and transportation (due to railroad) than other similar small communities. On the other hand, construction, nondurable manufacturing, and all of the services are under-represented.

Like other relatively undiversified, timber-dependent towns, Oakridge lost population during the recent recession. In July 1982, the city had lost 169 people since the 1980 census. It probably declined further due to mill shutdowns later in the year.

Unemployment figures for the Oakridge-Westfir area for 1983 are estimated below, based on the 1980 census data.

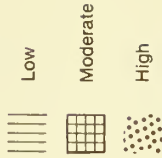
	Employed Persons	Unemployed Persons	Unemployment Rank
1980	1380	310	18.3%
Nov. 1983	1362	325	19.3%

The unemployment rate for Lane County as of November 1983 was 10.7% (personal communication from City of Oakridge)

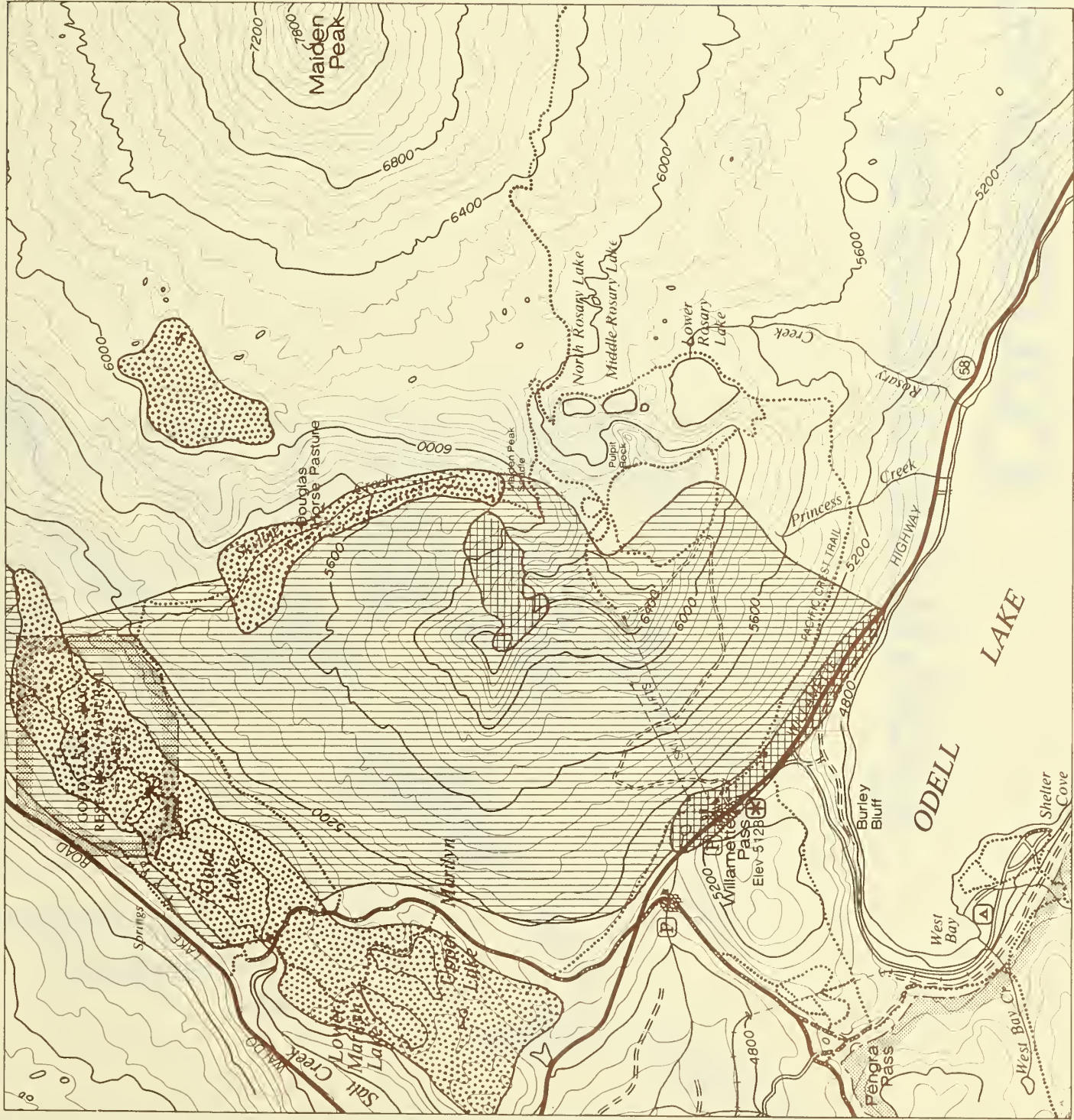


LEGEND

(Ability to Absorb Change)



VISUAL
ABSORPTION
CAPABILITY



Environmental Consequences



IV. ENVIRONMENTAL CONSEQUENCES

This chapter describes the environmental effects of the different alternatives. As applicable, each section includes discussion of on-site as well as off-site effects. Measures designed to mitigate adverse effects are also included in this section.

A. EFFECTS ON THE PHYSICAL ENVIRONMENT

1. Air Quality - The alternatives proposed would have a negligible effect on air quality. Total suspended particulate matter and carbon monoxide are the two most important aspects of the ambient air quality most affected by ski area development and operation.

Construction work would result in temporary increase of particulate matter from burning debris generated by clearing or building, emissions from construction equipment, and dust.

Operation of the area would involve emissions from heating and power sources and use of maintenance equipment.

The Highway 58 corridor through Willamette Pass has a higher concentration of carbon monoxide than the surrounding area. Increased traffic under the alternatives would result in some corresponding increases in carbon monoxide concentrations. Up to 1,250 additional vehicles are anticipated on site in the maximum development alternative. If more than 500 additional cars are anticipated in the selected alternative, the Willamette Pass Ski Corporation may need to obtain an Indirect Source Permit from LRAPA or DEQ (Note that because the affected area occurs in both Lane and Klamath County, two agencies

are involved). Prior to issuing a permit, LRAPA or DEQ will analyze the Corporation's proposal to see that air quality standards are not violated. No adverse effects are anticipated.

According to DEQ, the expected increases in carbon monoxide content would be undetectable in the Class I airshed of the Diamond Peak Wilderness. The increases would be insignificant for all alternatives.

No effects on the air quality of the non-attainment area near Eugene Springfield is anticipated.

MITIGATION

- Any burning activity associated with the construction will follow established Forest Service smoke management practices.
 - The Special Use Permit will insure prompt revegetation or other protection of all disturbed areas to reduce dust.
2. Avalanche Hazards - The avalanche areas identified are low to moderate during severe snow conditions which usually occur one or twice a season. Because Alternatives III through VI provide for increased ski activity along the ridge stretching between Eagle and West Peaks, the risk of an avalanche is greater than at present. This area tends to build up large cornices due to southwest winds. These areas are controlled by the area Ski Patrol and are off-limits to the public during time of avalanche danger. Other areas have been identified as potential avalanche paths.

Unstable snow during this time could be sufficiently controlled by ski cutting and machine packing. Blasting as a means to control hazard areas under most circumstances would not be required. The environmental consequences of blasting would be noise and gas emissions from the explosion and possibly disturbance of wildlife living in the area. In most instances, the snowpack will absorb the blast and insulate the underlying ground from damage.

MITIGATION

Avalanche evaluation and control is addressed in Willamette Pass Operation and Maintenance Plan. As a requirement of this plan, the area Ski Patrol must evaluate and ski test potential avalanche areas. Unstable snow during this time could be sufficiently controlled by ski cutting and machine packing to eliminate slide dangers before the public is permitted to ski the slope.

Boundary signs will be posted to help prevent skiers from entering uncontrolled avalanche hazard areas.

3. Soils - Ski area development will result in some erosion and subsequent loss of soil productivity. Removal of natural vegetation due to ski lift and run construction will result in a short-term loss of protective soil cover and increased soil erosion. The potential for soil erosion will depend extensively on the steepness of the slope. Soil compaction caused by the operation of heavy logging and maintenance equipment will probably result in an increased runoff from damaged areas. Although soil material is generally transported

and deposited on-site, eroded areas will be left in a less productive state.

Short-term erosion and loss of soil productivity can be mitigated by requiring prompt revegetation along lift lines and ski runs. See Appendix G for a detailed description of soil erosion control. Requirements are included as mitigation measures below.

Expansion of the ski area would result in an additional long-term loss of natural soil areas due to construction of buildings, parking lots, roads, and relocation of the Pacific Crest Trail. Some soil loss and ground compaction will occur in localized areas, particularly during construction, and may result in long-term erosion problems unless construction and maintenance activities are carefully carried out. Soil productivity in building sites, parking lots, and roads will be permanently reduced; these changes are, for the most part, irreversible and irretrievable.

The short- and long-term effects in soil productivity are shown in Table IV-1 for each alternative. The general effect on the soil resource due to constructing facilities can be seen in Table IV-2.

MITIGATION

Potential erosion and loss of soil productivity can be successfully mitigated in all alternatives. The cost of mitigation will be higher for Alternatives V and VI which propose the F chairlift on steep rocky slopes.

Table IV-1

POTENTIAL LOSS OF SOIL PRODUCTIVITY

ALTERNATIVE	SHORT TERM		LONG TERM
	ACRES OF EXPOSED SOIL	ACRES OF EXPOSED SOIL AFTER EROSION CONTROL	ACRES REMOVED FROM PRODUCTION
I	110	22	16
II	113	23	18
IIB	133	27	18
III	149	30	20
IV, IVB	212	42	27
IVC	212	42	22
IVD	192	38	27
V	220	44	29
VI	240	48	33

Table IV-2

GENERAL EFFECT OF DEVELOPMENT OF FACILITIES ON SOIL RESOURCES

FACILITY	LOSS OF SOIL PRODUCTIVITY		EROSION POTENTIAL
	SHORT-TERM	LONG-TERM	
New Chairlifts			
D	**	*	Low-Moderate
E	**	*	Low-Moderate
F	***	**	High
G	**	*	Low-Moderate
H	**	*	Low-Moderate
Parking Lot and Overnight Accommodations in Rock Quarry			
	*	*	Low
Catchline Road	***	**	Low
Road to Summit Lodge			
South Side	***	***	Moderate-High
North Side	***	***	Low-Moderate
Road to D Lift	***	***	Low-Moderate
Pacific Crest Trail Relocation	**	*	Low-Moderate
Nordic Center	*	*	Low
Summit Lodge	***	***	Moderate
Overnight Accommodations in Sleepy Hollow	***	***	Low

* Low Adverse Effect - Very little or no permanent soil resource damage will occur. Erosion and loss of soil productivity will be minimal.

** Moderate Adverse Effect - Some obvious soil resource damage will occur in disturbed areas. Some erosion and loss of soil productivity will occur.

*** High Adverse Effect - Considerable resource damage will occur in disturbed areas. Erosion and loss of soil productivity will be significant.

The following measures apply to all alternatives.

- Prior to the start of each season, the permittee will submit final construction plans for approval by the Forest Service. These plans will also contain Forest Service requirements to successfully revegetate all bare soil. To reduce the chance of concentrating surface runoff on access roads, outsloping and/or installing waterbars will be required. Compliance with all approved erosion control and revegetation measures will be a requirement of the Special Use Permit.

The following measures apply to the action alternatives (II-VI):

- Revegetation will be 80% successful on existing runs prior to allowing new construction or clearing to begin.
- Timber harvesting will follow standard Forest Service harvest practices and methods.
- Special contract clauses will be used for soil and water protection such as: water barring and ripping of major skid trails.
- In order to minimize impact on soil productivity during chairlift and run construction, special attention will be given to construction methods such as:

Prohibiting tractors on slopes over 30%.

Using specialized low-impact equipment (i.e., McKenzie Mucker) on slopes over 67%.

Using helicopters to install chairlift towers on slopes greater than 30%.

- To protect the more nutrient-rich surface soil horizon and protective duff layer, stump removal will be prohibited on north slopes ski runs. Snow cover should be adequate to cover stumps.

- Catchline road will be built to minimum standards (roughly 12 feet wide) and surfaced with native materials. Clearing will be kept to the minimum width (approximately 20 feet) needed for groomed cross-country tracks.

Road to Summit Lodge will be built to the minimum standards necessary to construct and maintain facilities.

General Effects on Soil by Alternatives

Alternative I

Continuing attention to potential problem areas (bare soils on lower slopes) will be necessary. Erosion control work will continue until revegetation is successful on 80% of the exposed areas or no more than 22 acres of bare soil remains. Some drainage work (outsloping and waterbars) will also be needed. Sixteen acres are removed from production due to development of buildings, roads, and parking lots.

Alternative II

Slight effect on soils due to addition of lift H. Constructing nordic center in existing northside parking area and expanding southside parking area in rock quarry will have negligible effect. Erosion control will continue until revegetation is successful on 80% of the exposed runs or until no more than 23 acres of bare soil are exposed. Eighteen acres are removed from production due to construction of buildings, roads, and parking lots.

Alternative IIB

Adding lift G and associated runs is expected to have low to moderate effects. The effect of a permanent southside road to the top of G lift would be moderate to high due to steep rocky ground. Erosion control will be required until no more than 27 acres of bare soil are exposed. All other effects are the same as described under Alternative II.

Alternative III

Adding lifts D and H, associated ski runs (D lift), and rerouting Pacific Crest Trail are expected to have low to moderate effects. The effect of a permanent road to the top of D lift would be high. Erosion control would continue until 80% of the runs are reseeded or no more than 30 acres of bare soil remain. Twenty acres are removed from production due to construction of buildings, roads, and parking lots.

Alternative IV (Preferred Alternative)

Effects from lift (D, E, and G), run construction and Pacific Crest Trail relocation considered to be low to moderate. All other effects, including construction of Summit Lodge and access roads, would be high as these areas would be essentially removed from the productive land base. Erosion control would continue until 80% of the area is reseeded or no more than 42 acres of bare soil remains. Total acreage removed from production due to construction of buildings, roads, and parking lots is 27.

Alternative IVB

Environmental consequences are the same as Alternative IV above with the following changes.

The addition of overnight accommodations in the rock quarry would be negligible. Twenty-nine acres are removed from production due to construction of permanent facilities.

Alternative IVC

Effect from lifts (D, E, and G), run construction and Pacific Crest Trail relocation considered low to moderate. Unless construction and maintenance activities are carefully carried out, compaction and related soil impacts would occur over a wide area. Erosion control will be required until no more than 42 acres of bare soil remains. Twenty-two acres are removed from production due to construction of buildings, roads, and parking lots.

Alternative IVD

Same as Alternative IV except that 38 acres would be exposed after erosion control.

Alternative V (Willamette Pass Proposal)

Effects from lift, run and trail development range from low to moderate with the exception of lift F which would have moderate to high effects and a high potential for soil erosion due to steep rocky slopes. All other effects would be moderate to high (as described under Alternative IV). Construction of overnight accommodations and increased parking capacity in the rock quarry would have negligible effects. Erosion control would continue until 80% or no more than 44 acres of bare soil remain. Total acreage removed from production due to construction of permanent facilities is 29.

Alternative VI

Effects from lift and run development range from low to moderate with the exception of lift F, which would have moderate to high effects and a high

potential for soil erosion due to steep rocky slopes. All other effects, including construction of overnight accommodations and parking in Sleepy Hollow, would be moderate to high. Erosion control would continue until 80% or until no more than 48 acres of bare soil remains. Thirty-three acres are removed from production due to construction of buildings, roads, and parking lots.

4. Water - The primary adverse hydrologic effects associated with the alternatives are the concentration of runoff and resultant erosion from ski slopes and related impacts on water quality; e.g., increased runoff from impervious surfaces such as roads, buildings and parking lots; disposal of sewage and storage of diesel fuel.

- a. Erosion Runoff and Ground Water Supply - Increased runoff will be generated by development of additional ski runs and lifts. The additional snow deposited in openings associated with the ski runs and lift lines will result in a minor increased amount of spring runoff. Access roads and the existence of the Summit Lodge will decrease the area of permeable soil tending to increase runoff and erosion.

The direct effects on Skyline Creek and wetlands northeast of the study area would be low because most soil material would be transported and deposited on site. Erosion activity would be highest during the construction period. State law allows temporary degradation of water quality during construction, but no detectable changes are expected to occur.

Sleepy Hollow Creek and the wetland areas southeast and west of the base lodge will receive the greatest percent increase of runoff in the study area (due to parking lots, roads, and structures). To date, construction of Phase I facilities does not appear to have affected water quality or wetland habitat and no additional impacts are anticipated under the expansion alternatives.

Groundwater supplies could be reduced slightly as a result of parking area and road construction and soil compaction in other areas. Some water which would normally infiltrate through the soil into the groundwater would be converted to surface runoff. If this runoff does not infiltrate into a wetland or soil area and directly enters the surface runoff stream system, it will be lost to groundwater. The effect will be proportional to the amount of area disturbed and its severity, but will probably be unmeasurable. Based on capability of the existing well at Willamette Pass Ski Area, water supplies are expected to be adequate for all alternatives (personal communication, Oregon Water Resources Division).

- b. Sewage Disposal - The base area includes the day lodge, ski school, ski patrol, and maintenance buildings. In accordance with requirements stated in the environmental assessment in Phase I developments and their Special Use Permit, the Willamette Pass Ski Corporation has submitted

plans for waste water sewage disposal in this area to the Oregon Department of Environmental Quality (DEQ) for an intermittent recirculating sand filter unit. The system is designed for a maximum daily flow of 12,500 gallons per day. Assuming 7.5 gallons of sewage per person per day, this system is designed to handle 1,670 people a day.

On weekends and holidays the sewage flow from the lodge and other facilities served by the sand filter is likely to exceed 12,500 gallons per day. There is a 36,000 to 50,000 gallon surge basin ahead of the filter to temporarily store this excess flow. Then, during the week when the flow to the filter is usually well below 12,500 gallons per day, the excess flow is treated. With this arrangement the flow passing through the filter can always be kept at or below 12,500 gallons per day. The sewage system (sand filter plus surge basin) can accommodate over 8300 skiers per day.

The filter unit and surge tanks are constructed of concrete below existing ground level on four sides, covered and insulated for cold weather conditions. The treated water is pumped to the existing drainfield. Solid waste is stored on-site and then transported to an approved disposal site. The permittee monitors the effectiveness of the waste treatment system as required by DEQ.

The Summit Lodge is planned to accommodate 426 SAOT. Based on the Soil Resource Inventory (Legard, et al 1973), the proposed site is characterized by shallow soils (less than three feet deep), rock outcrop and adjacent slopes in excess of 30%. These are all critical site parameters established by DEQ and the counties for the feasibility and/or design of an on-site sewage disposal system. The sewage disposal system will probably require special design considerations and a greater dollar investment to meet federal, state and county standards.

- c. Diesel Spills - Diesel fueled direct drive and/or electric drive power from a diesel generator are proposed for operating the new chairlifts. Each lift will be designed with two power drive systems or "prime movers" which require a 10,000 gallon fuel storage tank in order to operate for an entire season. The tanks will require summer access for refueling. Each lift will also have a small emergency auxillary system to provide standby power for lift evacuation if the "prime mover" fails.

If the Willamette Pass Ski Corporation selects to install three phase commercial electricity at the base area (estimated cost \$500,000), the chairlifts could be operated with electric power. A second "prime mover" (probably diesel driven) would still be necessary in case of a power failure. This option may be considered in the future.

The potential for fuel spills and/or leaks exists during the transporting, refueling and storage of the fuel. The environmental effects of a diesel spill would depend on its proximity to either ground or surface water sources. A diesel spill into permeable pumice and ash soils (characteristic of the study area) would disperse and dilute rapidly. These soils act like a filtration system. Petroleum products are less dense than water and thus float on the surface. However, if the diesel enters the groundwater system, wetlands or Skyline Creek north of the study area it could effect the water quality of a large area, including local marshes and/or Gold Lake Bog. Sensitive plants in the Gold Lake Bog Research Natural Area could be effected. A risk analysis which examines the probability and severity of a potential diesel spill relative to the location of diesel storage tanks is displayed in Table IV-3. To date, there have been no reports of diesel spills associated with fuel storage at Willamette Pass or other ski areas in Oregon (personal communication, DEQ).

MITIGATION

The following mitigation measure applies to all alternatives:

- The permittee will be required to maintain water quality on National Forest lands. The Forest Service will require facilities that might produce runoff tainted with salt, motor fuel, oils, diesel or other noxious substances to be located in

such a way that the runoff does not reach stream channel or groundwater source. The operating plan will be reviewed by DEQ and any recommendations will be incorporated into the Special Use Permit.

- Salting ski runs or using other chemicals to improve snow conditions is prohibited.

For Alternatives III-VI, which propose facilities on the north slopes, the following mitigation measures will apply:

- As part of the Special Use Permit requirements, the permittee will submit detailed, on-site, sewage disposal plans for the Summit Lodge to the Forest Service and appropriate state and county departments. Prior to construction, permits for sewage disposal must be obtained from the DEQ.
- The permittee will be required to follow safe transporting practices, sound construction methods for diesel storage tanks (including construction of secondary containment tanks), provide soil berms to prevent spilling, conduct regular monitoring (using early warning systems and/or area-wide surveillance methods), provide an effective hazard spill contingency plan and other measures designed to prevent spills.

GENERAL EFFECTS ON WATER RESOURCES BY ALTERNATIVES

Alternative I

Continued efforts required to maintain water quality at acceptable levels.

Table IV-3

RISK ANALYSIS FOR DIESEL SPILLS

Potential for diesel spills into Gold Lake Bog and Skyline Creek relative to the location of diesel storage tanks:

High, Medium, Low:

	PROBABILITY	SEVERITY
Top Drive *Lifts D, E and F	Low	Low
Bottom Drive *Lifts E and F	Low	Moderate
Bottom Drive *Lift D	Low	High

* The type of lift (top vs bottom) dictates the location of the fuel storage tanks.

Alternative II

Same as above. Adding H lift and expanding parking area are expected to have negligible effects on water quality and quantity.

Alternative IIB

Same as II above for G lift.

Alternative III

Adding D lift (with top drive power generation) and access roads are expected to have low adverse impact on water quality or quantity. Effect from expanding parking lot would be slight.

Alternative IV (Preferred Alternative)

Adding D, E and G lifts (with top drive power generation for D, and either top drive for E or combined power generation for E and G lifts) and runs is expected to have low adverse impacts on water quality or quantity. Because diesel fuels cannot be transported or stored near ground or surface water sources on north slopes, the potential for diesel spills into Skyline Creek, Gold Lake Bog and wetlands is low. Access and catchline road construction may result in moderate impacts. Addition of the Summit Lodge would require development of an individual water source and waste treatment system.

Alternative IVB and IVD

Same as IV above.

Alternative IVC

Adding D, E and G lifts (without the use of access roads) would be same as IV above.

Alternative V (Willamette Pass Proposal)

Adding D, E and F lifts (with bottom drive power generation) and runs, are expected to have moderate adverse impacts. The probability of diesel spills into active streams or groundwater is low, although the severity of such an event is moderate to high. Access and catchline road construction may result in moderate impacts. Addition of Summit Lodge would require development of an individual water source and waste treatment system. Overnight accommodations and expansion of parking area in the rock quarry would have low impacts.

Alternative VI

Effects from adding D, E, F, G and H lifts and runs would be moderate and influence a larger area than Alternative V. The probability of diesel spills into active streams or groundwater is low, although the severity of such an event is moderate to high. Access and catchline road construction may result in moderate impacts. The sewage system would have to be expanded to handle additional volume from overnight accommodations. Addition of Summit Lodge and overnight accommodations in Sleepy Hollow would require development of individual water sources and waste treatment systems. Expansion of parking area in Sleepy Hollow would have moderate effects.

5. Fire - Fire potential will increase during construction and clearing and will decrease after slash has been treated. The created openings will reduce long-term fire hazard by acting as a fuel break.

B. EFFECTS ON THE BIOLOGICAL ENVIRONMENT

1. Wildlife

- a. Deer and Elk - Overall impacts on deer and elk habitat will vary. All proposed alternatives, except I, should have the effect of improving forage production as shown in Table IV-4. The narrow nature of ski runs will ensure good utilization of the forage produced as animals need not move far from cover to feed. Also, required erosion control measures should greatly increase the quality of forage plants in the openings. On the other hand, opening the canopy generally reduces the production of fungi: i.e., mushrooms, lichens, etc., which animals use heavily in the spring time.

The second factor affecting deer and elk is that of increased human activity and its potential to disturb the animals and displace them from their accustomed use patterns. Since big game is not in the area during the winter recreation season, the primary disturbance potential will arise from construction periods and normal maintenance thereafter. The key time frame here would encompass spring and early summer. Lifts D, E, F and G and their associated access roads are all located in high use areas for this season. Animals will likely be displaced during the course of timber harvest and construction done during the months of June and early July.

Post-construction use will depend on the amount of maintenance traffic and activity.

Summer recreational use of the lifts as proposed could also displace big game from the area. This impact could be minimized by restricting summer lift activity to the south slopes of Eagle Peak.

Besides feeding in artificial openings, big game would probably find easy traveling on service roads if traffic is light.

Some of the proposed alternatives will impact big game more heavily than others. This relates particularly to alternatives IV, V and VI, which all propose to build the Summit Lodge. The lodge is proposed for a flat saddle which currently provides a travel corridor and substantial early summer forage. There can be no doubt that big game use of the area will decrease, due to constant presence of human activity and the necessary clearing which will reduce natural browse and fungi production. Placement of the lodge as far to the northwest of the saddle as possible could reduce the impacts significantly. A distance of 200-300 feet would leave the flat portion relatively undisturbed. This would increase the likelihood of continued utilization of the travelway and reduce the impact on a preferred forage area. The northwest side of the saddle is rockier and drier, and there was little evidence of animal use there.

Closure of the lodge to public use during the summer would be necessary to continued use by deer and elk.

A second area which could be negatively impacted is the flat bench northeast of the saddle. Lift E and its associated runs pass through this site and could change its micro-environment to the extent of discouraging its use by elk. The risk would be alleviated by choosing an alternative which does not build lift E, or by reducing the number of runs which transect the flat.

- b. Wolverine - Little is known about ski area effect on wolverines, but some degree of negative impact to wolverine habitat and use patterns would appear inevitable in the case of the proposed expansion. If the Willamette Pass area is, in fact, part of a wolverine's home range, it is likely that the increased human presence during the winter, coupled with noise generated by grooming and lift machinery would combine to remove the actual ski area and some distance around it from the animals' effective habitat base.

We can probably anticipate reduced use by wolverines in the immediate vicinity of the expansion, but since the area encompasses roughly $1\frac{1}{2}$ square miles, the overall impact on an animal with a 60 square mile winter territory may be minimal.

Dr. Maurice Hornocker, who researched wolverines in Montana, supports this theory. (Hornocker, Personal communication) He indicates that the animals would avoid the immediate vicinity of the expansion in winter, but asserts that the large size of their home range would render the overall impacts insignificant. Consequently, wolverine use of the Gold Lake area should not be affected. Impacts are more likely at Douglas Horse Pasture, but are probably not inevitable. During the winter, downhill skiers will be restricted by the catchline road. Disruption of wolverines using Douglas Horse Pasture would be the result of noise from lifts and grooming machinery. The base of the closest lift is 2300 feet from Douglas Horse Pasture. The catchline road at its nearest point is 1300 feet away. Because of the distances involved, normal maintenance of ski facilities in the expansion areas should have relatively little impact on wolverines if they were, in fact, using the Horse Pasture.

The increases in vegetative diversity and forage production could have a beneficial effect on big game and rodent/rabbit populations. An overall increase in the prey base of the area could improve the lot of resident wolverines, if they were still inclined to use the vicinity of the proposed expansion.

Hornocker and Hash (1981) assert that habitat manipulations which increase herbivore and small mammal

populations, and thus increase the food supply for primary predators whose kills provide carrion sources for wolverines could be beneficial. This point is qualified by the extent and design of the manipulation with respect to wolverine ecology. In Montana, the basins, southerly and easterly slopes, edges, and ecotones were described as preferred, and ideally should be left intact. If these areas are avoided and created openings are designed to encourage big game, then some benefit may be realized for wolverines.

Possibly the most direct mitigation might be an artificial human-caused increase in the wolverine's food supply. Strickland, (et al, 1982) noted that many trappers distribute carcasses of beaver as food for fisher to increase the carrying capacity of their range. Theoretically, it appears this technique could work for wolverines. Carcasses of road-killed big game or domestic herbivores could be placed in areas known to be frequented by wolverines.

A risk analysis which examines the probability and severity of the loss of habitat utilization by the wolverine due to the expansion of the Willamette Pass Ski Area is analyzed in Table IV-5.

- c. Fisher - Fisher appear to be more adaptable than the wolverine, but there is little evaluation in the literature of their propensity to coexist with humans and their

activities. Primary detrimental effects on the fisher appear to be direct mortality by trapping. Evidence indicates that the fisher, although protected in Oregon, could be vulnerable to mortality by incidental catch in traps set legally for marten. Heavy winter recreational use of an area such as Willamette Pass would seem likely to discourage trappers due to the potential for trap disturbance and vandalism.

If, in fact, fisher currently breed in the proposed expansion area, there is a potential for disruption or displacement of the animal. Winter travel circuits of the fisher range from 10 to 30 km in diameter (de Vos, 1951). In New Hampshire, Kelly (1977) reported densities of one fisher per 3.9 to 7.5 km, and yearly home ranges of 1500 ha (15.3 km) for adult female fisher. The affected portion of the ski area expansion of the north side of Eagle Peak is about 4 km. The likelihood of disturbance to more than one breeding fisher is probably low. Further, Kelly (1977) noted substantial overlap of ranges in all sex and age categories. Consequently, if a fisher were displaced, it might be able to establish a new nest den with little difficulty.

Construction of the Summit Lodge access road and portions of the ski runs could result in the loss of ridgetops used by fisher as travelways.

Table IV-4

ACRES OF AVAILABLE DEER AND ELK FORAGE

Alternatives	Acres
I	88
II	91
IIB	106
III	119
IV, IVB, IVC	170
IVD	154
V	176
VI	192

Table IV-5

RISK ANALYSIS FOR LOSS OF HABITAT UTILIZATION BY WOLVERINES

What is the probability and severity of loss of habitat utilization by wolverines in the following areas? H = High M = Moderate L = Low

LOCATION	PROBABILITY	SEVERITY
Study Area (1,100 acres)	H	M
Douglas Horse Pasture- Gold Lake Bog	L-M	L
Local Wolverine Winter Territory (60 sq. mi.)	L-M	L-M
Central Cascades	L	L
Oregon	L	L

A summary of the process used to derive this analysis is located in Appendix C.

- d. Marten - It would appear that martens and their habitat would be generally compatible with the proposed development. There would probably be some winter displacement from the immediate activity area, but as in the case with fisher, this may be compensated for by a probable reduction in trapping effort. Since openings for ski runs will be generally less than 100 feet wide, their use by foraging martens will probably continue after expansion. Prey rodent habitat and den opportunities for the marten could be improved by deliberately leaving slash piles and cull logs just into the timber at the edge of the runs.

The propensity of martens to utilize the edges of both natural and artificial openings has been well documented in the literature (Koehler and Hornocker 1979, Simon 1980; Soutiere 1979, Spencer 1981, Strickland, et al 1982)

Overall, it appears the marten probably is compatible with the expansion. The only substantial impact might be loss of some ridgetop travelways to the Summit Lodge access road and some ski runs.

- e. Threatened, Endangered and Sensitive Animals - There are currently five identified bald eagle nests in the Odell Lake area. All five trees containing nests have been tagged and their specific locations have been identified (personal communication, Resource Assistant of the

Crescent Ranger District, Deschutes National Forest).

Bald eagle breeding typically involves proximity to a large body of water. Based on the location of Odell Lake with respect to Willamette Pass Ski Area, there should be no adverse effects on their breeding success. Bald eagles in the Odell Lake area are already exposed to a significant amount of human activity.

There should be no impact to peregrine falcons since they are not known to rest in the area.

A spotted owl management area (SOMA) is located to the west of the expansion area. The catchline road as proposed, touches the east boundary of the SOMA near the center of section 32. No trees will be removed within the boundary of the SOMA. Owl habitat near the east boundary of the SOMA is marginal, composed of sparse, open-crowned stands of true fir and lodgepole pine. The nest grove of this SOMA is believed to be located at least $\frac{1}{2}$ mile west of the east boundary, in the vicinity of Gold Lake. Consequently, no impacts on the owls are anticipated as a result of the expansion.

MITIGATIONS

Reseed slopes with edible grass species for deer and elk for all alternatives.

The following measures apply to alternatives III to VI which propose facilities on the north slopes of Eagle and/or West Peak.

- Allow only administrative and maintenance motorized use of catchline and other service roads to reduce displacement of deer and elk.
- Restrict summer lift activity to south slopes of Eagle Peak.
- Close Summit Lodge to public use during the summer.
- If feasible, construct Summit Lodge 200-300 feet northwest of saddle to minimize disruption of deer and elk travel corridor.
- To enhance marten habitat, pile slash along side runs to increase rodent population.
- Place carcasses of wild or domestic ungulates in wolverine winter habitat.
- Restrict E and G lifts and Summit Lodge construction from mid to late summer.
- To minimize the human disturbance relocation of the Pacific Crest Trail will be carefully located to avoid critical wildlife habitat areas. (Meadows, small lakes, etc.)

General Effects On Wildlife Resources by Alternative

Alternative I

Eighty-eight (88) acres of deer and elk forage available. No change in existing wildlife setting.

Alternative II

Ninety-one (91) acres of deer and elk forage available. No adverse effect on wolverine, marten or fisher.

Alternative IIB

Same as II above except 106 acres of deer and elk forage available.

Alternative III

One hundred nineteen (119) acres of deer and elk forage available. Slight reduction in fungi production and short term displacement of deer and elk during construction of D lift. Possible reduction in habitat use by wolverine, fisher and marten due to increased human activity on north slopes. Loss of marten and fisher habitat.

Alternative IV (Preferred Alternative) and IVB

One hundred seventy (170) acres of deer and elk forage available. Minor reduction in fungi production. Short term displacement of deer and elk during lift construction. Decreased use of travel corridor due to Summit Lodge and lift E. Effects on wolverine, marten and fisher are similar to Alternative III.

Alternative IVC

Same as IV above except decreased use of travel corridor due to lift E.

Alternative IVD

Same as IV above except 154 acres of deer and elk forage available.

Alternative V (Willamette Pass Proposal)

One hundred seventy three (173) acres of deer and elk forage available. Other effects are same as Alternative IV.

Alternative VI

One hundred ninety (190) acres of deer and elk forage available. Other effects are the same as Alternative IV.

2. Fisheries

The environmental effects of fisheries resource are described in the section on water.

3. Vegetation

The major changes in the study areas would be an increase of grasses and forbs and a loss of mature conifer trees. The estimated gain of grass-forbs and associated loss of mature timber types range from 110 acres to 240 acres. This shift from older to younger timber types would be permanent in most areas. On the steeper slopes and higher elevations where grooming is difficult, the grass-forb stage may be allowed to succeed into the shrub stage. When shrubs and small trees exceed three feet in height, hand brushing may be necessary. Relocation of the Pacific Crest Trail will require removal of small trees, shrubs and branches of larger trees. The amount of vegetation removed temporarily for runs and permanently for roads, parking lots and structures is also indicated in Table IV-6

4. Sensitive Plants

A field survey for rare, threatened and endangered plant species was conducted in the study area. No sensitive species were found in the immediate area of expansion. However, sensitive plant species are known to occur in the Gold Lake Research Natural Area. Special

habitat types do occur in and near the proposed ski development and trail relocation areas. (See Appendix F).

MITIGATIONS

During the design phase, conduct an intensive on-the-ground inventory of the areas after trails, ski runs, chairlifts, roads and Summit Lodge have been flagged. Adjust design to conserve all sensitive plant species as necessary.

5. Gold Lake Bog Research Natural Area

The environmental effects on Gold Lake Bog Research Area are described in the section on water.

C. EFFECTS ON THE SOCIAL ENVIRONMENT

1. Recreation

Recreational opportunities considered in the alternatives will affect the total recreation situation in the Willamette Pass area. Additional development will increase the skiing capacity which will meet part of the growing demand for skiing and other winter recreation activities. Development of the ski area provides the opportunity for a large number of recreation visits on a relatively small area of land.

Ski area development is a long term commitment of the area to high intensity use. The level of commitment varies in proportion to the level of development and amount of area involved.

Addition of more ski terrain and facilities will be considered beneficial to the recreational

Table IV-6

IMPACT ON VEGETATION

Alternative	Acres Cleared for Buildings, Roads, and Parking Lots	Acres Cleared (Alpine and Nordic) and Created for Grass and Forbs.
I	16	110
II	18	113
IIB	18	133
III	20	149
IV, IVB	27	212
IVC	22	212
IVD	27	172
V	29	220
VI	30	240

experience by some users. Others who prefer the existing solitude and natural character of these areas will find the effects adverse. Both of these are long-term effects.

a. Developed Recreation

Lifts and Ski Runs

Downhill skiers will have an acceptable quality of recreation experience under all the alternatives. Potential experiences will vary among the alternatives due to differences in terrain available, facility development, and number of users. Map 17 and Tables IV-7 and IV-8 describe the facilities, ski lifts and runs proposed in all the alternatives.

Alternatives III through IV also provide a better mix of beginner, intermediate and advanced runs. This will be particularly important to the intermediate skier because existing areas available for their use at Willamette Pass Ski Area are limited and subject to poor snow conditions due to low elevation. Existing intermediate terrain at higher elevations is currently limited to one ski run which is the most congested run on the mountain. Development of the north slopes (under Alternatives III through VI) will open up intermediate terrain at higher elevations.

Snow conditions for skiing

Marginal snow conditions at Willamette Pass usually occur because of 1) lack of snow during the early part of the

season and 2) poor quality snow due to south exposure. The colder climate due to higher elevations on the north slopes provide for greater snow depth, dryer/colder snow, and reduction in icy conditions which result from the melting and refreezing of the snowpack. Snow fall records indicate that the snowpack may be sufficient for skiing on the north slopes even though there may be insufficient snow to ski the south slopes. Poor snow quality occurs during the later part of the season when bright sun turns the snow to slush. North side runs would offer significantly better snow quality which would attract more skiers thus increasing the economic stability of the ski area.

During poor snow years, several options are currently available to the permittee. These include 1) groom base area and transporting snow to areas that are bare, 2) make snow; or 3) operate Summit chairlift (A) from midway station to the summit of Eagle Peak. Even during marginal snow conditions it is anticipated that some less exposed runs (like Kaleidoscope and Perseverance) will have sufficient snowpack to allow for skiing back to the base area.

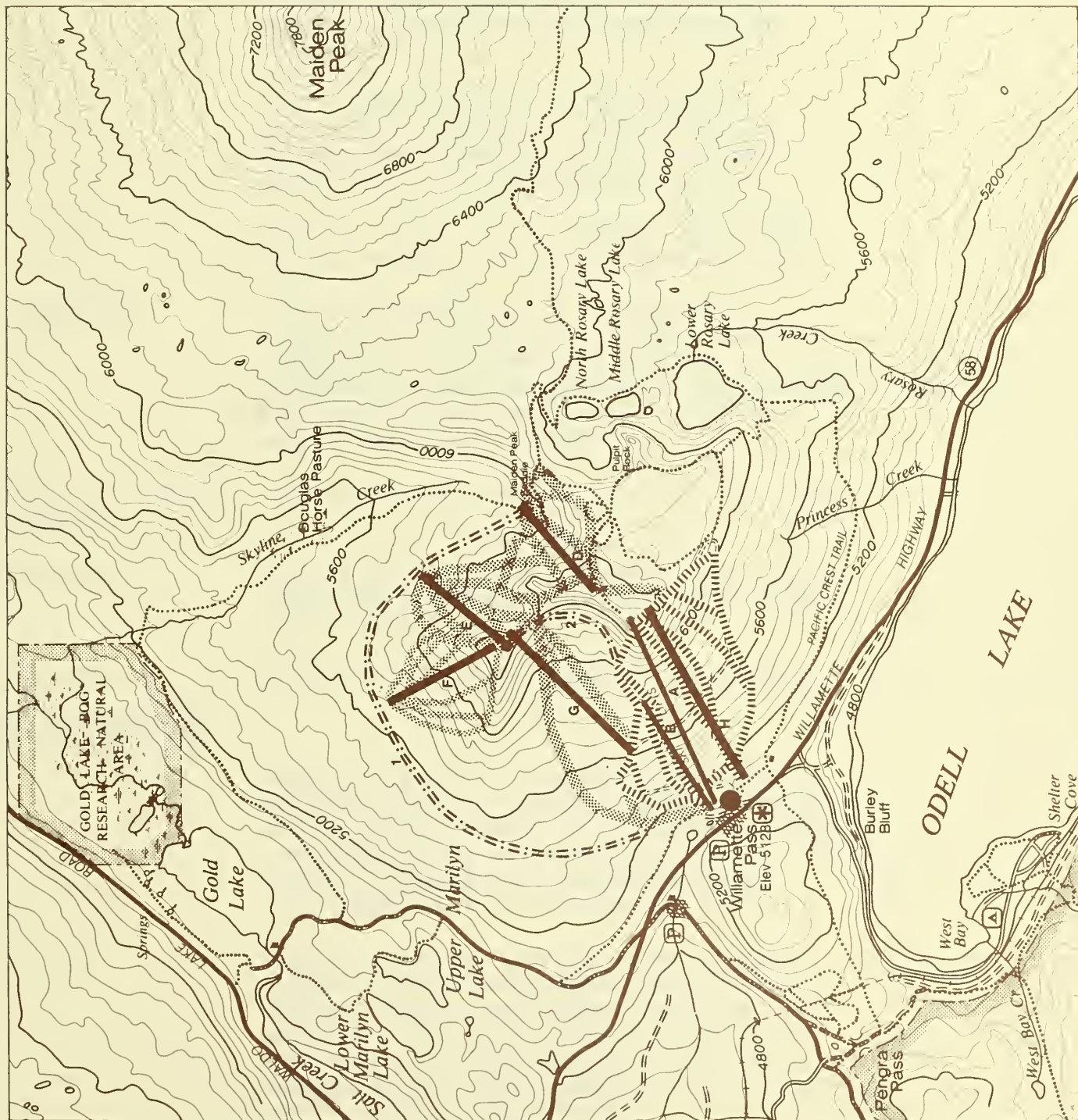
For Alternative III through VI an additional option is available: operate chairlifts D, E and/or F on north slopes. If insufficient snow exists on the southside runs to ski back to the base area, transporting skiers down the lifts to the base area would be a



SCALE IN FEET
0 1000 2000 3000 4000
CONTOUR INTERVAL: 80'

LEGEND

- Base Facilities
- Summit Lodge
- A — Existing Chair Lift
- B — Proposed Chair Lift
- D — Existing Ski Runs
- H — Proposed Ski Runs
- 1 — Catch Line Road
- 2 — Summit Lodge and Top Terminal Access Road



EXISTING AND
POTENTIAL
DEVELOPMENT
FOR ALL
ALTERNATIVES

Table IV-7

DESCRIPTION OF EXISTING AND PROPOSED FACILITIES

Existing Facilities

A The Summit lift (double chair) provides access to good beginner, intermediate and advanced terrain. Night skiing is available from the midway point down.

B The Twilight (triple) chairlift serves beginners and intermediate skiers. The lift relieves skier congestion on the Summit chair. Night skiing will be available on two runs.

C Existing rope tow serves beginner skiers which will be replaced with a new beginner chairlift.

Day Lodge The new 40,000 square foot lodge currently accommodates 2,177 people at one time. Additional loft space can be added to serve future restaurant, bar and restroom needs. The day lodge can provide adequate facilities for base area needs under all alternatives.

Ski Patrol, Ski School, and First Aid These services are provided in the old day lodge.

Racing Shed Races will be scheduled. Skiers can also practice racing skills through a self-timed course during normal operation hours.

R.V. Park Winter and summer R.V. hookups for 30 vehicles.

New Lifts Considered

D Opens up triple chair on slopes of Eagle Peak. The north exposure or abundant vegetative cover would provide for better snow conditions, maximum snow retention and wind protection. The new lift would add intermediate and advanced terrain. It is accessible to the existing ski area.

E Opens up additional intermediate and advanced terrain on the northern slopes of West Peak. The north exposure and abundant vegetative cover would provide for better snow conditions, maximum snow retention and wind protection. The top terminal of this triple chairlift would be located near the proposed Summit Lodge.

Table IV-7 (Continued)

- F Opens up advanced and expert terrain on the west slopes of West Peak. The slopes are steep, rocky and exposed to southwest winds. The top terminal of this triple chair would be located adjacent to the proposed Summit Lodge.
- G This triple chair will provide skier transport from northwest of chairlift B to the saddle east of West Peak (adjacent to the proposed Summit Lodge). The terrain opens a broad bowl with numerous steep rocky sections.
- H New triple chair running parallel to existing Summit Chair (A). Relieve congestion on existing chair and provide access to northern slopes.
- A1 Renovate existing summit chair (A) from a double to a triple chair.

Cross-Country Trails
Nordic Center

Groomed trails for cross-country skiers would be developed west of the base area 2.5 miles and along the catchline road (2.5 - 4 miles). The trails will be located to provide reliable snow conditions, topographic variety, and to avoid obvious hazards, including avalanche terrain. The system will provide routes of varying lengths and difficulties with loops and connector trails. A nordic center would be constructed at the west end of the existing parking area.

Summit Lodge

A new mountain lodge would be constructed on the saddle, east of West Peak, to service skiers on the northern slopes of the ski area. An alternate location is proposed on the bench north of the saddle. It would include tables and chairs for 61 persons, restaurant, restroom and communication with base lodge. Capacity = 426 SAOT.

Employee Housing

Provide 15 units of employee housing in rock quarry in south parking lot.

Overnight Accommodations

Provide 20 to 30 units either in the rock quarry in south parking lot or in Sleepy Hollow east of the base lodge.

Table IV-7 (Continued)

Relocate Pacific Crest
National Scenic Trail

Relocate three miles of existing trail. The proposed route leaves the existing PCNST just west of Boundary Pass or Maiden Peak Saddle and will traverse the east side of the ridge extending north between Skyline Creek and Maiden Peak. After crossing an open flat area on the northern end of the ridge, the route descends northwest where it intersects the existing PCNST, about one mile south of Bobby Lake. The three mile route passes through predominately mature stands of mountain hemlock with some open areas of scattered lodgepole pine, western white pine, and Pacific silver fir. Ridge walk provides scenic views east of the Rosary Lakes and Maiden Peak. Alternate locations include the ridge top or further east down the slope.

Table IV-8

DESCRIPTION OF EXISTING AND PROPOSED SKI LIFT AND RUNS

LIFT	LIFTS		!!		RUNS		
	VERTICAL FEET	LIFT CAPACITY (SAOT)*	!!	NUMBER	ACRES (Beg Inter, Adv)	ACRES ON NORTH SLOPES	ACRES GREATER THAN 5500' ELEVATION
Existing			!!				
A	1,525	704	!!	7	12 Beginner 26 Intermed. 28 Advanced	0	77
B	800	947	!!	5	30 Beginner 12 Intermed. 0 Advanced	0	0
C	100	200	!!	1	2 Beginner 0 Intermed. 0 Advanced	0	0
D	750	853	!!	9	10 Beginner 15 Intermed. 11 Advanced	25	43
E	800	817	!!	8	15 Beginner 28 Intermed. 0 Advanced	29	19
F	750	412	!!	7	0 Beginner 21 Intermed. 7 Advanced	24	21
G	600	473	!!	3	2 Beginner 18 Intermed. 0 Advanced	0	10
H	1,525	1,284	!!				
A1	1,525	1,284	!!				

*SAOT = $\frac{\text{Vertical rise} \times \text{lift capacity} \times \text{hours of operation} \times 0.9 \text{ load}}{\text{Vertical feet skied per person per day}}$

viable alternative. This is a common practice at many ski areas when inadequate snow exists to ski at lower hill elevations.

During severe winter drought, the permittee would most likely close for all or portion of the season.

In summary, Alternatives III through VI will lengthen the ski season, provide more consistent and higher quality snow and may ensure better snow conditions in drought years by making higher elevation and north slope areas available.

Nordic Facilities

Under Alternative I there is no opportunity for skiing on groomed cross-country ski trails in the Willamette Pass Area.

All expansion alternatives (II-VI) provide for a nordic center and groomed cross-country tracks with different mileages.

Increasing numbers of nordic enthusiasts desiring the benefits of groomed trails must travel to Mt. Bachelor despite extra costs and time involved. These participants include: people with limited physical abilities who desire or even require a stable track in order to participate safely, and learners of all levels from beginning tourers to advanced racers who are attempting to perfect their techniques.

The groomed trails would increase diversities for nordic facilities and also provide skiable trails during period of poor snow conditions when the other trails in the area are icy and difficult to ski, especially for a beginner.

There would be a charge for cross-country skiing on a maintained track. Nordic skiers who are unwilling to pay would be displaced.

The 2.5-mile catchline road would serve both as a double lane groomed track and as a service access for winter and summer use. A minimum standard road would allow easy access for lift and run construction and maintenance of bottom terminals. More importantly it would provide a safety and access route to remove injured skiers.

Summit Lodge

The Summit Lodge proposed in Alternatives IV-VI would provide visitor services (food, restaurant, etc.), a warming hut for emergency purposes, and allow for better management of north slopes. Although it is not necessarily needed to expand base area capacity (the new day lodge is large enough to accommodate skiers under all alternatives), the Summit Lodge would offer scenic views of Diamond Peak and would provide a site attraction for the ski area.

The proposed Summit Lodge and south side access road would be built in an area with moderate visual absorption capability (Map 16). If

properly designed, the facilities would be built to blend in with the natural environment in such a way as to retain the area's visual integrity. In a similar fashion, ski runs can be made to appear more natural by feathering runs with islands and natural openings. (See discussion under Visual Resources in this chapter).

Other Facilities

Summer activities approved during Phase I development include recreational vehicle lodging for 30 R.V. units, summer chair rides, an outdoor amphitheater and restaurant.

Employee housing at Willamette Pass was initially considered during Phase I expansion in 1983. At that time, it was determined that the facilities did not meet Forest Service criteria as explained in FSM 2340.3, R-6 Supplement 54 and will not be considered further.

Extending the recreation season into the summer will open the ski area to additional users and make better use of existing facilities.

Alternatives IVB, V and VI also propose overnight accommodations for 20 to 30 units. See discussion of environmental effects in section on describing impacts in local communities. The proposed facilities are consistent with the area's allocation to potential winter sports development as identified in the current Willamette National Forest Plan.

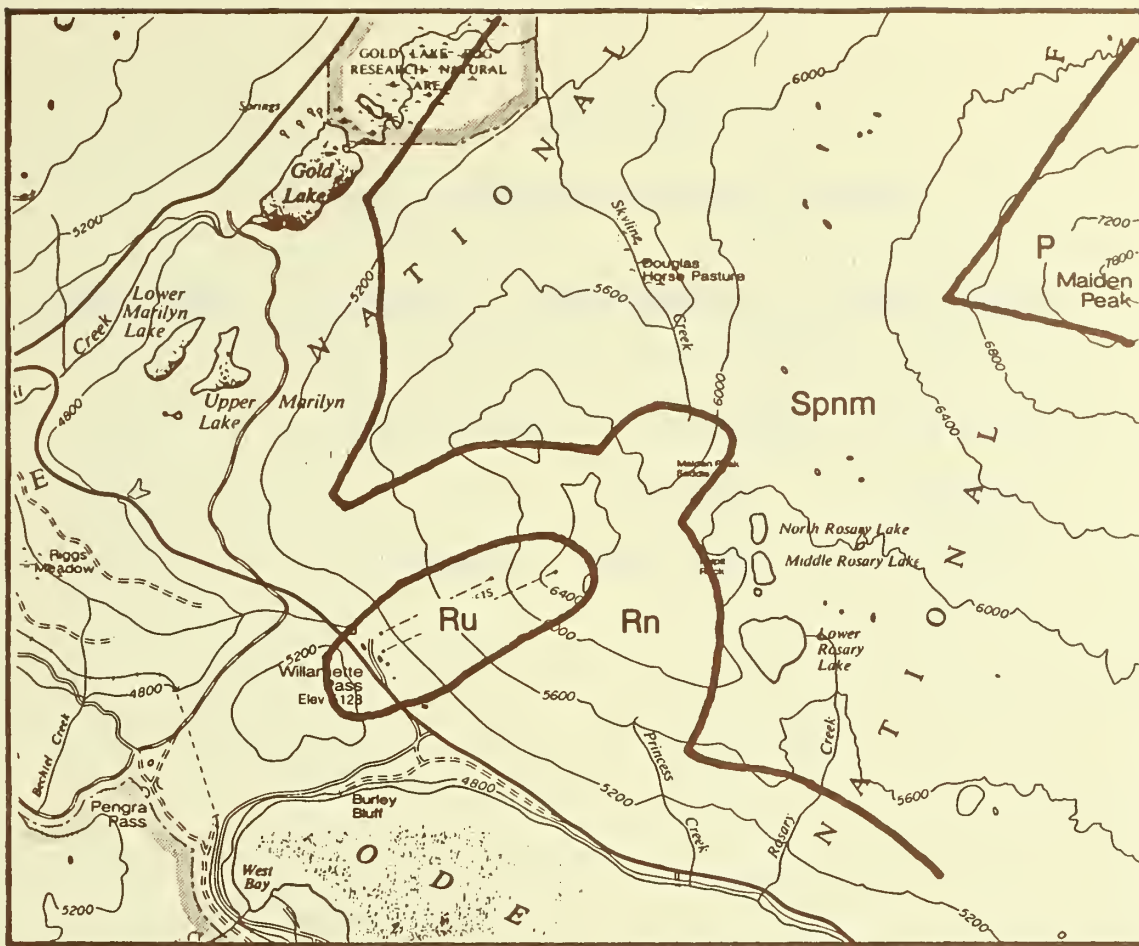
b. Dispersed Recreation

Undeveloped Areas

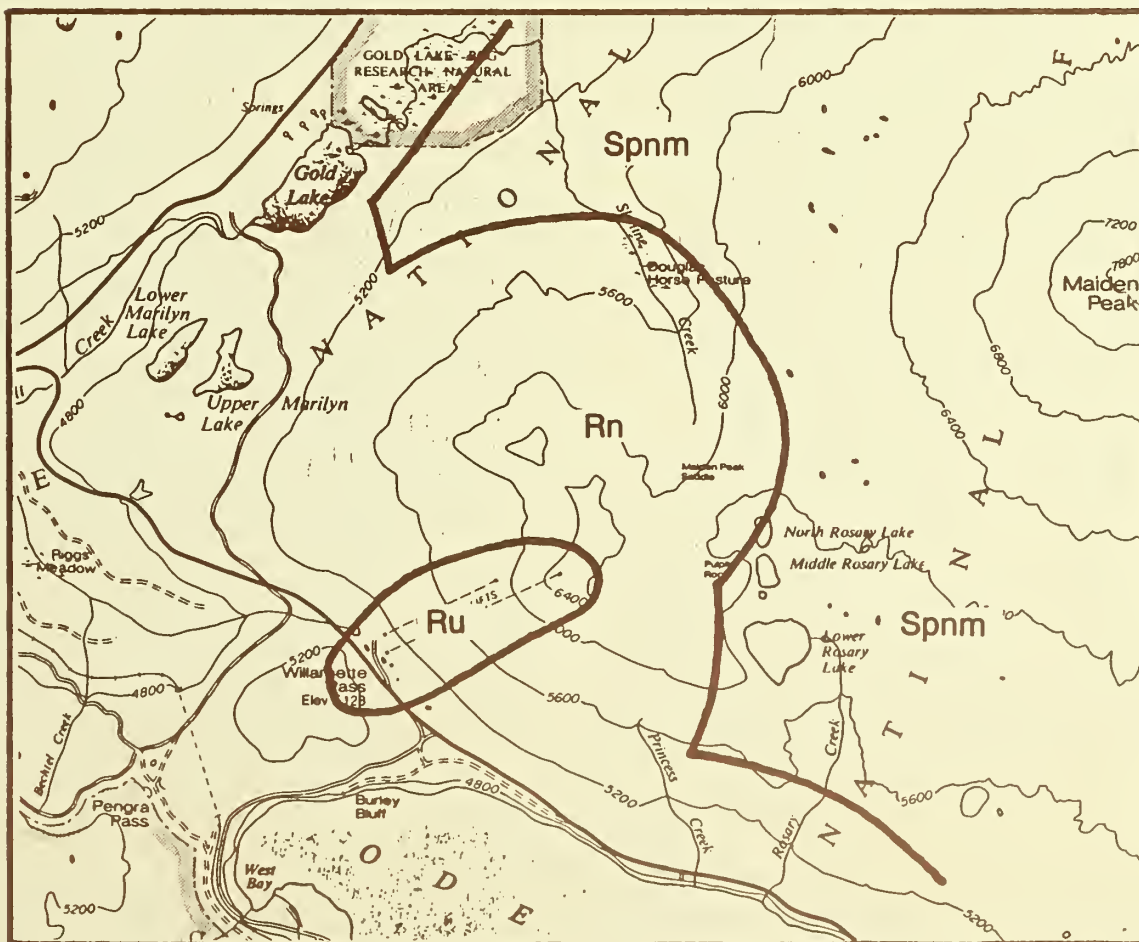
Alternatives I and II retain the primitive and semiprimitive dispersed recreation opportunities on the north slopes. Implementation would not change the Recreation Opportunity Spectrum (ROS) classes as shown on Map 14.

Alternatives III through VI propose facilities on the north slopes of Eagle and/or West Peaks. Implementing these alternatives would alter the existing unroaded nature of the immediate area. The changes in ROS class can be seen in Map 18 and are tabulated in Table IV-9. These changes would be permanent or irreversible.

Overall, expansion of the ski area would have minimal effects on the semi-primitive and primitive dispersed recreation activities in the area. The large undeveloped area north of the immediate study area would remain unchanged. Over 35,000 acres would be retained in a semi-primitive or primitive state (defined for this purpose as more than $\frac{1}{2}$ mile from any road). Under all alternatives, dispersed recreation opportunities would also be available in the Three Sisters and Waldo Wildernesses to the north, and the Diamond Peak or Mt. Thielsen Wildernesses, and the Oregon Cascades Recreation Area to the south (Map 12).



Alternative III



Alternative IV-VI

RECREATION OPPORTUNITY SPECTRUM

Table IV-9

CHANGES IN RECREATION OPPORTUNITY SPECTRUM

ALTERNATIVES	PRIMITIVE	SEMI-PRIMITIVE	ROADED NATURAL
I	-----NO CHANGE-----		
II	-----NO CHANGE-----		
III		-133 Acres	+133 Acres
IV-VI	-1,012 Acres	-406 Acres	+1,418 Acres

Snow Play

Further expansion of the Willamette Pass Ski Area (Alternatives II through VI) will require the upper level of the quarry to be developed into parking. This will significantly reduce the usable snowplay area forcing users to move to steeper and more hazardous ground. This additional safety risk plus the fact that snowplay activity is not covered by Willamette Pass's insurance carrier will probably prohibit snowplay in the quarry in the future. The Forest Service will attempt to locate an alternate snow play area outside the permit boundary.

Cross-Country Skiing

The expansion alternatives (II to VI) allow for continued winter and summer use of existing trails. Implementation of these alternatives would affect the user's experience level. These alternatives provide for a wider variety of cross-country skiing opportunities to be available to the public.

Alternatives III-V propose relocating the Pacific Crest Trail which would add three miles of winter trail to the existing cross-country trail system. This would create a new loop trail connecting portions of the "old" and "new" Pacific Crest National Scenic Trail (PCNST). Nordic skiing access from Maiden Peak Saddle to Skyline Creek would be retained in these alternatives.

Some cross-country skiers may be affected by ski area development on the north slopes. The proximity to downhill skiers would lessen feelings of solitude and accomplishment cross-country skiers may have by "working" their way across the area. Some users desiring a more remote cross-country experience may choose to go elsewhere, while others may enjoy using the lift and the safer feeling of a more developed area. Winter camping and climbing could still continue because these areas are large enough to also support dispersed, more primitive uses on their fringes.

Nordic activity would also increase due to presence of groomed track. Cross-country skiing on existing Forest Service trails would continue at no cost.

Summer Use

The presence of ski area facilities in previously undeveloped areas on the north slopes of Eagle and West Peaks may have a negative effect on the recreation experience of hikers and backpackers traveling through the area. Alternatives III, IV and V propose relocating the PCNST to the north ridge between Skyline Creek and Maiden Peak which would by-pass the expansion area and retain the semi-primitive experience associated with it. This location offers scenic views of Rosary Lakes and Maiden Peak. At one point the D lift line and some runs may be visible from the trail. The

overall effect of visual quality would be negligible.

The proposed relocation would improve existing trail by eliminating resource impacts adjacent to Douglas Horse Pasture, north of the study area. Although open to winter skiing, summer traffic would be rerouted and portions of the trail would be put back to bed. Relocation costs would be paid for by the permittee.

Under the maximum development alternative (VI) the PCNST would pass near the lift D terminal. The scenic quality will decrease on that portion of the PCNST.

Annual maintenance costs would be the same for all alternatives (approximately \$470 per year).

Some types of summer uses may detract from the experience desired by dispersed recreation users.

Recreationists who wish to hike or observe wildlife may be adversely effected by developed uses, while others would enjoy combining a lift ride with a hike down through the ski area. Summer lift use will require trail development to reduce negative effects on soils, vegetation, and wildlife and broaden recreation opportunities.

Attraction of summer recreation use to the ski area may have a secondary beneficial effect on the business and services in Willamette Pass Area.

MITIGATION

- Night skiing permitted on south side only, including Peek-A-Boo, By George, and Rough Cut runs.

The following mitigation measures apply to the action Alternatives.

- Color and design of Summit Lodge will blend with natural environment. Provide opportunity for public input during design stages through the environmental analysis process.
- Construct road to Summit Lodge from north side in such a manner as to retain visual integrity. Follow proposed ski runs and lift lines where possible.
- The surface and cleared right-of-way on the catchline road will be seeded to reduce impacts on visual resources.
- Feather runs with islands and natural openings to make visual appearance more natural.
- Provide nordic skiers access from Maiden Peak Saddle to Skyline Creek.
- The relocated PCNST will meet design and construction criteria outlined in the National Trail System Act. Grade will be limited to 10% to minimize erosion due to runoff. Tread will be outsloped to prevent water from collecting and running down trail. Water dips or bars will be used in areas where outsloping of tread is not possible. A special effort will be made to meet cross-country ski trail standards (grade and alignment) to accommodate winter use and to offer the winter and summer user the best views possible along the proposed ridge location. These requirements will be made part of the Special Use Permit operating plan. Relocation will take place prior to or during installation of D lift.

General Effects on Recreation by Alternative

Alternative I

- No increase in diversity of alpine or nordic winter sports activities.
- Poor snow years may result in loss of visitor days. Area closed portions of season.
- Retain primitive dispersed recreation opportunities; no change in Recreation Opportunity Spectrum.
- Summer facilities will include RV park, summer chairlift rides, outside amphitheater and restaurant.

Alternative II

- No increase in diversity of alpine winter sports activities.
- Poor snow years resulting in loss of visitor days. Area closed portion of season.
- Increase skier capacity by 1,284 SAOT over Alternative I.
- Increase in diversity for nordic facilities.
- Retain primitive dispersed recreation opportunities; no change in Recreation Opportunity Spectrum.
- No change in proposed summer activities.

Alternative IIB

- Increase in skier capacity by 1,757 SAOT.
- Minor increase in diversity of alpine sports activity. Three new runs added on lift G.

- Poor snow years may result in loss of visitor days. Areas closed portion of season.

- Effects in nordic and dispersed recreation activities are the same as for Alternative II.

Alternative III

- Increase in diversity of alpine and nordic facilities.
- Provides for more consistent and higher quality skiing, and extended length of season.
- Ensures for better snow conditions in poor snow years.
- Increase skier capacity by 1,433 SAOT over Alternative I.
- Relocation of PCNST will increase the trail's scenic quality and improve skiability.
- Change in Recreation Opportunity Spectrum. The semi-primitive class is reduced by 133 acres. Rural class reduced by 3 acres and roaded natural increased by 136 acres.

Alternative IV (Preferred Alternative)

- Increase in diversity of alpine and nordic facilities. Better mix of beginner, intermediate and advanced runs and more groomed nordic trails.
- Provides for more consistent and higher quality skiing.
- Ensures for better snow conditions in poor snow years.
- Increase skier capacity by 2,143 SAOT over Alternative I.

- Relocation of PCNST will increase the trail's scenic quality and improve skiability. Annual maintenance cost \$467.00.

- Change in Recreation Opportunity Spectrum. Primitive class reduced by 1,012 acres, semi-primitive by 406 acres, and roaded natural increased by 1,418 acres.

Alternative IVB

- Effects on recreation are the same as described for Alternative IV.

Alternative IVC

- The following effects on recreation are in addition to the effects described under Alternative IV.
- Limited access to injured or lost skiers on north slopes.
- 2.5 fewer miles of groomed nordic track than under Alternative IV.
- No provisions for skier safety or comfort on north slopes. No warming hut, restaurant or restroom facilities.

Alternative IVD

- Same as Alternative IV above with the following exceptions.
- Increases skier capacity by 2,250 SAOT over Alternative I.
- Minor maintenance problems, a temporary shut down would result in long lift line on summit chair (A) and/or stranded skiers on north slopes.

Alternative V (Willamette Pass Proposal)

- Increase in diversity of alpine and nordic facilities. Better mix of

beginner, intermediate and advanced runs and more groomed nordic trails.

- Provides for more consistent and higher quality skiing.
- Increase in skier accidents associated with steep runs off F lift.
- Ensures for better snow conditions in poor snow years.
- Increase skier capacity by 2,662 (SAOT).
- Relocation of PCNST will increase trails scenic quality and improve skiability.
- Change in Recreation Opportunity Spectrum (ROS) same as for Alternative IV.

Alternative VI

- Increase in diversity of alpine and nordic facilities. Better mix of beginner, intermediate and advanced runs and more groomed nordic trails.
- Provides for more consistent and higher quality skiing.
- Increase in skier accidents associated with steep runs off F lift.
- Ensures for better snow conditions in poor snow years.
- Increase skier capacity by 4,843 (SAOT).
- Change in Recreation Opportunity Spectrum (ROS) same as for Alternative IV.
- The scenic quality of the PCNST will decrease. Hikers will walk by D lift terminal.

2. Cultural Resources

Based on the cultural resource field inventories made, the alternatives will have no effect on this resource. If cultural resources are located prior to or during construction, Federal law and Forest Service policy require that such find(s) are to be evaluated as to their significance by a professional cultural resource specialist.

MITIGATION

If cultural resources are located prior to or during construction under contract clause C6.24#, work affecting that specific site will have to be halted until cultural resource management compliance is complete (36 CFR 800), though other activities/work may continue in unaffected portions of the overall project.

3. Noise

The operation of ski lift generators and snow grooming equipment may result in an increase in noise in the study area. Compared to the existing traffic sounds, snow blowers, and snow plows on Highway 58, the noise effect of adding two new lift generators (G and H) and grooming additional runs would be negligible for Alternatives I and II. Noise increase would be most noticeable on the undeveloped north slopes of Eagle and West Peaks.

There are no established state noise level standards which apply to the study area and vicinity.

Diesel driven generator noises consist of exhaust and cooling fans. These sounds can be mitigated by designing a bank, or noise buffer, for diesel

generators during the lift design stage in such a way as to protect speech of lift users. According to Oregon Department of Environmental Quality (DEQ) standards, two people speaking 10 feet apart create a noise level of 55 decibels. A well designed (top or bottom drive) ski lift should operate at under 45 decibels 50 feet away from the generator. If mitigated, the diesel driven generators would not be intrusive. If electric systems are used to power lifts, noise effects will be minimal.

The Willamette Pass Ski Corporation operates snow grooming equipment on gentle to moderate slopes. The majority of grooming occurs before 9:00 a.m., prior to lift operation. A Pisten Bully snow groomer used by Willamette Pass Ski Corporation produces a maximum of 80 decibels at a distance of 21 feet. (This noise level would be roughly equivalent to flooring a vehicle in second gear going 25 m.p.h.). Assuming no vegetative or topographic screening, one groomer would operate at a noise level of 50 decibels at a distance of 670 feet or roughly 1/8 mile.

The maximum area affected by snow grooming noise corresponds roughly to the area classified as the Roaded Natural as shown on Maps 14 and 17 for Alternatives I through IV. These represent maximum areas because actual noise effects will be attenuated by the sound absorbing qualities of vegetation, snow and topographic blocking. Winter campers in the areas shown on Map 17 would probably hear the groomer. The impacts are greatest for Alternatives IV through VI.

MITIGATION

- Provide copy of ski lift design to DEQ for review. Restrict noise of diesel driven generator (or diesel driven electric powered generators) to 45 decibels at a distance of 50 feet.
- Require night or early morning snow grooming to reduce noise effects. Retain maximum vegetation in surrounding areas to absorb noise.

4. Visual Resources

Computer graphics were used to analyze the potential effects of ski area development on visual resources at six selected viewing areas. The determination of the six viewing areas (three primary and three secondary) was based on the degree of public concern expressed during scoping.

The computer plots shown in Figures 1-6 simulate the effects of maximum development of ski runs and lift construction on visual resources as seen from Odell, Gold and Waldo Lakes (primary viewing areas) and Mt. Ray, Mt. Fuji and Maiden Peak (secondary viewing areas). The plots simulated would be seen by the natural eye at the designated viewing distance. Table IV-10 describes the ski lifts and runs which would be visible from different viewpoints, viewing distances and projected visual quality objectives which would be achieved by maximum ski area development.

General Effects on Visual Resources by Alternative

Alternative I

Existing facilities (A, B, C lifts) meet modification VQO as seen from Odell Lake. No change in VQO as seen from other viewpoints.

Alternative II

Same as Alternative I.

Alternative III

D lift would meet modification VQO as seen from Maiden Peak. No change in VQO's as seen from Odell, Gold, and Waldo Lakes; Mt. Ray; and Mt. Fuji.

Alternative IV (Preferred Alternative), IVB, IVC, and IVD

D and E lifts would meet modification VQO as seen from Maiden Peak. No change in VQO's as seen from Odell, Gold, and Waldo Lakes; Mt. Ray; and Mt. Fuji.

Alternative V (Willamette Pass Proposed)

D and E lifts would meet modification VQO as seen from Maiden Peak. F lift would meet modification as seen from Gold Lake, Mt. Ray and Mt. Fuji. No change in VQO as seen from Waldo Lake.

Alternative VI

Same as Alternative V.

Trash

Trash discarded by visitors is likely to be a minor or insignificant esthetic impact on and immediately adjacent to the runs during the snow free months. The effects can be satisfactorily mitigated.

Table IV-10

EFFECTS OF MAXIMUM SKI AREA DEVELOPMENT ON VISUAL RESOURCES
AS SEEN FROM SIX SELECTED VIEWING AREAS

VIEWPOINT	EFFECT ON VISUAL RESOURCES
Odell Lake from Trapper Creek Campground Viewing Distance = 2 miles	Existing runs associated with Summit Lift (A) are visible. There was very little leeway to alter design of runs due to south exposure. In order to retain shade, runs were kept narrow, with straight boundaries that follow fall line. H lift line would be visible; D, E, F and G lifts and runs would not. Existing and projected VQO = modification.
Gold Lake from Middle of Lake Viewing Distance = 1.5 miles	The upper one third to one half of the F lift line and ski runs would be visible. D, E, G and H lifts and runs would not be visible. Projected VQO = modification to partial retention.
Waldo Lake from North End of Lake. Viewing Distance = 10 miles	D, E, F, G and H ski trails and lift lines would not be visible. Projected VQO = retention.
Waldo Lake from Rhododendron Island. Viewing Distance = 8 miles	The study area drops from view behind an intervening ridge. No effect.
Maiden Peak from Summit Viewing Distance = 2.5 miles	The D and E lift lines and ski runs would be visible; F, G and H would not. Projected VQO = modification.
Mt. Ray from Summit Viewing Distance = 4 miles	The F lift line and associated ski runs would be visible; D, E, G and H would not. Projected VQO = modification.
Mt. Fuji from Summit Viewing Distance = 5.5 miles	The F lift line and associated runs would be visible; D, E, G and H would not. Projected VQO = modification.

VIEW DIST: 42 INCHES



SOUTH SIDE OF SKI AREA AS SEEN FROM SHELTER COVE, ODELL LAKE:

35mm CAMERA WITH 50mm LENS

PERSPECTIVE PLOT

Figure 1



NORTH SIDE OF SKI AREA AS SEEN FROM GOLD LAKE: F LIFT.

VIEW LEFT. 43 LIONS. SECTION 5.

NORTH SIDE OF SKI AREA AS SEEN FROM WALDO LAKE:

35mm CAMERA WITH 50mm LENS

Figure 3

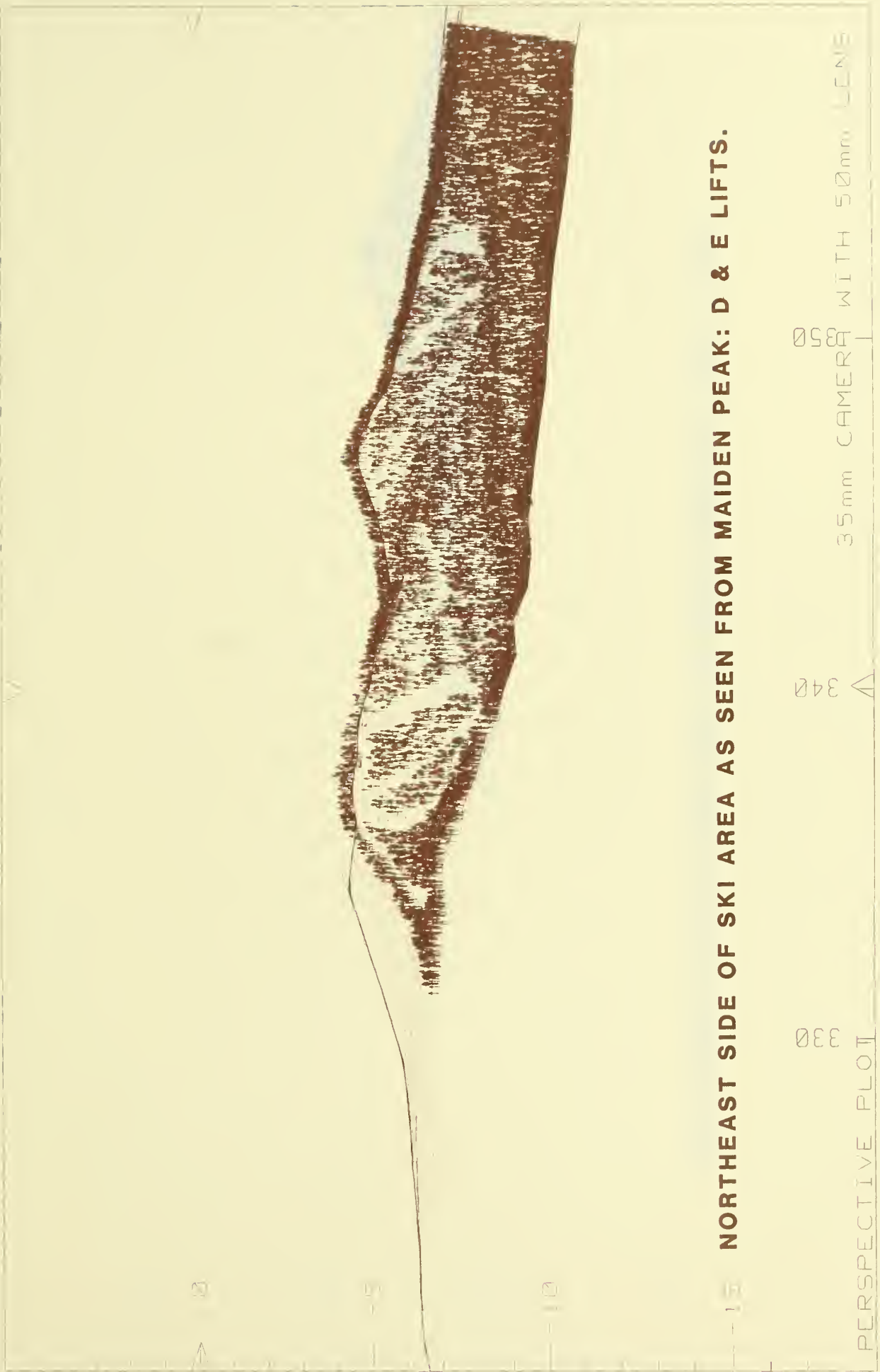
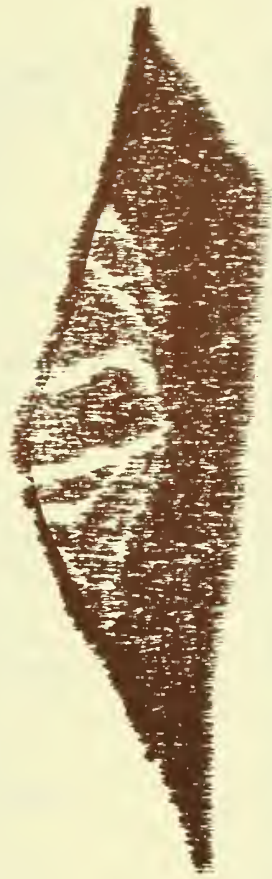


Figure 4



NORTHWEST SIDE OF SKI AREA AS SEEN FROM MT. FUJI: F LIFT.

Figure 5



NORTH SIDE OF SKI AREA AS SEEN FROM MT. RAY: F LIFT.

MITIGATION

Require post-season cleanup of runs and lift lines by permittee.

5. Transportation

The Oregon State Highway Department (personal communication) estimates that Highway 58 can accommodate an additional 900 vehicles per day above the existing parking lot capacity at Willamette Pass Ski Area. (The current nine acre parking lot can handle roughly 630 cars). In other words, Highway 58 has the capacity to carry up to 1,530 cars per day to the ski area without taxing highway capacity. The cars and buses anticipated for each alternative are shown in Table IV-11. For the calculations, it is assumed that one car carries three to four people (average 3.2 persons/each) and 90% of the recreation visitors arrive by car and 10% by bus.

Oregon State Highway Department notes the increase in traffic will cause bottlenecks specifically at the Salt Creek tunnel and the last section of road (with increasing grade) to Willamette Pass. The Oregon Highway Plan (The Oregon Department of Transportation Highway Division) classified Highway 58 as a D level of service. This classification denotes the degree of congestion on the roadway. The congestion may be caused by such factors as large volumes of traffic, poor road configuration -- i.e. tight curves and narrow lanes -- and no passing opportunities. Level of Service D allows for traffic movement at approximately 40 MPH.

Traffic capacity on Highway 58 is not expected to be exceeded until the year 2000 (personal communication, Oregon State Highway Department).

In addition to the bottlenecks at specific places, an increase in traffic accidents is expected especially during periods when driving conditions are hazardous.

With the exception of Alternative VI, (which exceeds the present capacity of Highway 58 by 350 vehicles), there would be no adverse effect on highway capacity.

Maintenance costs on Highway 58 will not be effected; the cost to plow and sand the road is independent of the number of vehicles using it (personal communication, Oregon State Highway Department).

The additional parking required under Alternatives II through VI would be met by expanding the existing parking area in the rock quarry on the southside of Highway 58. Although the quarry is still active, roughly 5 to 7 additional acres of parking are potentially available. The proposed parking expansion would involve enlarging the existing area as well as building two additional levels. An overpass or flashing warning lights will be installed to protect pedestrians crossing the highway, as required in the decision and development of Phase I.

Alternative VI proposes building four acres of additional parking space in Sleepy Hollow east of the existing permit area.

Table IV-11

VEHICLES STORED ON-SITE (PER DAY) .

ALTERNATIVE	Cars	Bus	ACRES OF PARKING LOT
I	627	7	9.0
II	1,037	12	11.0
III	1,086	13	13.0
IV	1,266	15	14.3
V	1,266	15	14.3
VI	1,883	22	18.3

Cost and effects from snow removal will increase with the level of development in the alternative. The cost of plowing the parking areas will be paid for by the permittee at their request. Sno-Park permits will not be required. The parking lots will be open to public use although the permittee may charge a minor fee to cover snow plowing costs. The charge is subject to Forest Service approval.

MITIGATION

Require signing or parking lot attendant for safety and to inform public when the lots are full.

6. Local Communities

- a. Housing - The Crescent Lake Junction currently has 550 acres planned for residential use of which 110 acres (or 20%) are already developed. An additional 60 acres is planned for commercial use (motels, restaurants, etc.) of which 14 acres (23%) are developed. In general, the Crescent Lake Junction area has a high vacancy rate; a large percentage of land is available for growth. Ski area expansion may result in increased real estate values in the area. Most of the housing increase is expected to be second homes owned by Eugene-Springfield residents and recreational/resort accommodations. This will lead to short periods of occupancy focused on weekend and vacation use. An increase in motels and restaurant construction may also take place.

Real estate values in the Oakridge area are not expected to increase.

- b. Community Services - Residents and commercial businesses in the Crescent Lake Junction community utilize individual septic systems and wells. New permits are evaluated on a site-specific basis. Special consideration is given to soil depth (on hillside) and high ground water table (in low lying areas) Some buildings may be required to use sand filler units instead of septic tanks. To date, well water is of high quality and is in sufficient abundance to meet the community needs; no shortages are anticipated. Other community services (fire, schools, etc.) are adequate for the area's needs.

Personal communication with Klamath County Sheriff Department (Deputy Awwiller) notes that no increase in police services would be required. The major increase in the number of people in the area will be in the winter time when access to recreational cabins is limited. Personal communication with the resident Deputy (Norm Hatcher) indicates that an increase in police services may be needed for the Odell Lake area but would not be implemented due to budget constraints. Due to the limited winter access in this area, any vandalism or thefts are not realized until access is available sometime in the spring. Deputy Hatcher was not sure that any additional police services would be beneficial due to the snow bound conditions in the Odell Lake area.

The Oakridge Ambulance service has experienced an increase in calls since the latest expansion at Willamette Pass (personal communication, Oakridge Fire Department). The Oakridge Fire

Department currently operates with three ambulances, five paid employees and 18 volunteers.

Although the number of ambulance calls have increased, no change in normal operations is expected.

State planning requires an updated community plan every two to five years to re-evaluate changes in the area. At present, there is an opportunity for growth in the Crescent Lake Junction community. No impacts are expected in community services under any of the alternatives.

- c. Economic Diversification - The Crescent Lake communities expressed strong support for the expansion of the Willamette Pass Ski Area during the survey process (November 1983 and September 1984 meetings).

The socio-economic overview of the Willamette National Forest (1984) summarized results of a random survey of Oakridge residents conducted by the University of Oregon. The results indicate that 79.8% of the respondents thought it was extremely important for Oakridge to diversify its economy. Many of the responses (59.4%) thought developing tourism would "probably" help. Specifically, 63.6% thought that expansion of the Willamette Pass Ski Area would be "probably helpful." The cities of Eugene, Oakridge, and Springfield have also expressed full support of the proposed expansion.

The expansion of Willamette Pass Ski Area is in accordance with the City of Oakridge's Comprehensive Plan. The expansion would further economic diversification by encouraging recreation development in surrounding forest lands.

- d. Employment - Growth in skiing leads to reinforcement of seasonal fluctuations in employment. Additional development will provide more operation, maintenance, food services, sales and cashier work on a continuing basis. An estimate of the number of employed persons for each alternative is shown in Table IV-12. The calculations are based on an average of one employed person per 18 skiers at one time capacity (Willamette Pass Ski Corp., personal communication). The majority of employees would come from the local community area (Oakridge to Crescent Lake).

To accommodate employees living outside the commuting area, the Willamette Pass Ski Corporation built 30 units of employee housing in Crescent Lake Junction. It is conceivable that additional units of housing could be added to accommodate employees should expansion occur.

Encouragement of summer use in the ski area will provide additional jobs and help to generate year-round use which benefits the communities as well as the Willamette Pass Ski Area. However, businesses in the area will continue to have cyclic seasonal fluctuation in profits and jobs available. Small commercial recreation businesses will continue to develop.

- e. Overnight Accommodations - The discussion of the existing and potential demand for overnight accommodations is taken from the University of Oregon, Department of Urban Planning Study entitled:

Table IV-12

NUMBER OF SEASONALLY EMPLOYED PERSONS AT WILLAMETTE PASS SKI AREA

<u>ALTERNATIVE</u>	<u>EMPLOYED PERSONS</u>
I	103
II	174
III	182
IV	232
V	250
VI	318

An Analysis of the Current
Potential Demand for Overnight
Accommodations in the Willamette
Pass Recreation Area, 1984 .

Pertinent key findings include the following:

Total overnight visitors at Willamette Pass have increased by 72% since early 1980's.

There is an increasing interest in overnight accommodations with the preferred type of accommodations being no ownership; i.e., motel. The demand for overnight winter accommodations will increase over the next 10 years from 4696 to 5641 overnight visitors.

There are about 140 overnight units in the Willamette Pass area. In winter there is usually an excess supply of lodging; except during the Christmas holiday season, when lodging demands keep resorts at a near capacity level.

Overnight visitors added \$500,000 to local economy during 1983. Under the No Change Alternative, this contribution should exceed \$600,00 by 1990.

The study recommends that the Willamette Pass-Crescent Lake Junction communities work together to promote use of lodging facilities in the area. This may include the following:

- Joint shuttle bus system
- Joint promotional activities and planning councils.
- Build new cabins only when winter break-even point can be reached or when summer occupancy can make up for winter deficits.

--Build shared tennis courts and/or swimming pools.

--Increased market activities focusing on Eugene-Springfield area.

--Share costs of road maintenance equipment.

--Promote activities to reduce mid-week slump.

--Offer services and discounts to Willamette Pass skiers to encourage use of overnight accommodations.

It appears on the surface that adding 20-30 motel units at Willamette Pass Ski Area would have a detrimental effect on occupancy at other private and permitted resorts in the surrounding area. According to Professor Dave Povey, University of Oregon (personal communication) the effect would be just the opposite. In his opinion, a small number of units at Willamette Pass Ski Area would encourage overall skier use and would also promote use at resorts in adjacent areas. Local resort owners and Forest Service permittees have mixed reactions. They know the expansion of Willamette Pass is having an overall positive effect on business in the area. They feel uncertain of how on-site accommodations could affect their business.

The Forest Service has several additional concerns regarding overnight facilities at Willamette Pass.

- The area was designed as a day-use area for Eugene-Springfield communities and not intended to be developed as a destination resort.

- Overnight accommodations on private land are currently available within 6-30 miles in Crescent Lake, Crescent Lake Junction and Oakridge.
- Other Forest Service permittees currently operate year-round resorts within 2-6 miles of the ski area. On-site accommodations could undermine their success.
- Constructing motel units in an active rock quarry poses problems from an operational as well as an esthetic perspective.
- Site development in Sleepy Hollow would involve additional environmental impacts due to construction of separate sewage and water facilities.
- The State Highway Department currently uses the Sleepy Hollow area to store road maintenance equipment and gravel to use during the winter for road plowing. This facility would have to be relocated.

In summary, it seems premature to support or even thoroughly consider on-site overnight accommodations on Forest Service land at this stage without further study.

MITIGATION

Overnight accommodations will be considered only after a thorough study is completed by the permittee. The study will be conducted by a qualified independent party and follow established guidelines. An environmental analysis will be conducted at the permittee's expense to analyze and document their findings.

- f. Minorities and Civil Rights - No known factors exist in the alternatives which will limit individual civil rights of any individual or groups. A provision in the Special Use Permit requires the permittee to comply with Title VI of the Civil Rights Act and other federal regulations regarding minorities, handicapped, aged and women.

With increased development at the ski area, there will be an increase in the number of service jobs available which may, in part, be filled by local minorities.

D. EFFECTS ON THE ECONOMIC ENVIRONMENT

Economic

Recreationists using Willamette Pass Ski Area influence the economic structure of the surrounding communities. In general it is anticipated that the degree of change in economic conditions will increase in relation to the level of development involved in the alternative.

1. Secondary Revenue

Increased skier visits has had a positive economic effect on the communities in the Willamette Pass market area. According to Schaudt, Stemm and Wild, Inc. (see letter in Appendix H), the construction and operation of Phase I facilities has generated considerable sales for equipment suppliers throughout Oregon, including service, utility, mechanical, electrical and construction items, plus regular delivery of food and supplies. Construction materials of all types have been manufactured and/or obtained within the state.

The sectors of the economy that can expect to receive expenditures from the skiing public in the future are listed below. The percentage of the total expenditure is also noted.

	Percentages
Food & Drink:	
Purchased meals	15.9
Grocery related	4.1
Clothing	3.8
Transportation/Communication	4.9
Lodging	19.4
Recreation	35.9
Government	.3
Wholesale	5.2
Retail	7.7
Other Services	2.8
	<hr/> 100.0

Source: Implan Data Base for Forest Plan; Early Winters Ski Area Analysis in Okanogan County, Washington

Most sectors of the economy affected by the Willamette Pass Ski Area operation and potential expansion occur in Lane or adjacent counties. For example, approximately 98% of the amount of money spent for downhill skiing by recreationists impacts sectors which occur in Lane County. It seems reasonable to assume that a good proportion of the products and services will be purchased locally. In reality, the likelihood of the financial returns being recirculated within the Lane County Area depends on numerous factors such as price, product availability, transportation costs, etc.

The Crescent, Oakridge and Eugene-Springfield areas would receive additional secondary revenue as a result of the expansion at Willamette Pass. A method of estimating this secondary revenue

is by using a multiplier factor. This multiplier estimates the secondary revenue generated for every dollar spent on an activity. The secondary revenue calculated using this method provides a basis for comparing the environmental effects of the different alternatives. Based on studies for other construction projects in the Eugene-Springfield area, a conservative estimate for a multiplier for skiing as a day-use area is three. This would assume that for every dollar spent on skiing, three dollars would be spent in a different section of the economy in the local area. A conservative estimate of a multiplier for chairlift construction and other capital investments is two. Table IV-13 details the secondary effects of alternatives. Note that the secondary effects associated with skiing are on annual estimated return, whereas the effects associated with construction are a one-time estimated return.

Ski area expansion will also increase the tax dollar received by counties and State from direct payments and indirectly from tourist traveling to area. As noted by several members of the business community, ski area expansion will assist in attracting new business and industry to the Eugene-Springfield area.

2. Return to U.S. Treasury

The annual return to the U.S. Government is based on a proportion of the Willamette Pass Ski Corp. sales and gross fixed assets. In the past several years the average return to Treasury equaled roughly 2.5% of sales. Assuming that sales would increase in proportion to skier capacity and that 2.5% of

Table IV-13

DOLLARS ADDED TO PRIMARY MARKET AREA

1. ANNUAL RETURN BASED ON SKIER VISITS NEEDED TO BREAK EVEN

REVENUE FACTORS							(Preferred Alter.IV)		(Will. Pass Proposed)			
	I	II	IIB	III	IVD	IVC	V	VI				
A. Projected Skier Visits Needed to Break Even (from Table V-18).	78,050	93,230	100,650	93,890	116,110	114,000	120,090	145,240				
1/ Total Dollars Spent per Visit	15	15	15	15	15	15	15	15				
C. Multiplier (Skiing)	3	3	3	3	3	3	3	3				
D. Annual Est. Secondary Rev. (AxBxC)	\$ 3.51 MM	\$ 4.20 MM	\$ 4.53 MM	\$ 4.23 MM	\$ 5.22 MM	\$ 5.13 MM	\$ 5.40 MM	\$ 6.54 MM				

2. ONE-TIME RETURN BASED ON CONSTRUCTION

REVENUE FACTORS							(Preferred Alter.IV)		(Will. Pass Proposed)			
	I	II	IIB	III	IVD	IVC	V	VI				
E. Construction (Dollars)	2.74 MM	3.37 MM	3.95 MM	3.37 MM	5.35 MM	5.04 MM	6.17 MM	6.75 MM				
F. Multiplier	2	2	2	2	2	2	2	2				
G. One-time Estimated Rev. (ExF)	\$ 5.48 MM	\$ 6.74 MM	\$ 7.90 MM	\$ 6.74 MM	\$ 10.70 MM	\$ 10.08 MM	\$ 12.34 MM	\$ 13.50 MM				

1/ This is a conservative estimate. Based on the 1984-85 season, the average amount spent per skier visit is \$16.50 (personal communication, Willamette Pass Ski Corp.)

2/ Includes \$2.19 million invested as of October 1983 and \$0.55 million anticipated to complete Phase I developments.

sales is an average return, the return to U.S. Treasury was calculated for each alternative as shown in Table IV-14.

Revenue would also be generated on a one-time rather than annual basis from harvesting the timber cleared for ski lifts, runs, roads and buildings. Timber in the study area is a mixture of mountain hemlock and noble fir at approximately 25 thousand board feet per acre. The average value of timber is estimated at \$50 per thousand board feet. Roads and other facilities built to remove timber will be utilized in operation of the Special Use Permit resulting in lower timber sale preparation and administration costs and a positive net return to the U.S. Treasury.

The other revenue factors considered in the analysis include administrative and capital investment costs. Current administrative costs equal \$5000 per season. This value would not change because the number of days spent administering the ski area would remain constant whether or not expansion took place. Costs for maintaining Forest Service campgrounds and roads were considered minor. New improvements would be based on available capital investment dollars for summer use and would not be influenced either way by ski area expansion.

3. Effects on Mt. Bachelor and Hoodoo Ski Areas

The trends in downhill skier visits in Central Oregon as well as the relative share of skier visits for the three major ski areas can be seen in Table IV-15 and IV-16 for the last ten to twenty years.

There are several variables which affect the total number and relative proportion of skiing occasions in Central Oregon. Three important factors include snow conditions, level of facility development, and area management and marketing. Each factor is discussed below.

During poor snow years such as the 1981-82 season, the total number of skier visits in the Central Cascades generally remains constant; however, the relative proportion of skier visits at high elevation areas such as Bachelor increases at the expense of low elevation areas such as Hoodoo and Willamette Pass.

A shift in skier visits from Bachelor to Hoodoo and/or Willamette Pass occurs during good snow years as evidenced by the 1981-82 season (see Table IV-15).

In the last twenty years, there have been several shifts in skier visits from "less" developed to "more" developed areas (see Table IV-16). Hoodoo expanded in the 1960's; skier use shifted from Willamette Pass to Hoodoo.

At that time, both Hoodoo and Willamette Pass were jointly owned by Hoodoo. Mt. Bachelor experienced an increase in skier visits during the 1970's as the area developed. Note that since the mid 1970's, Hoodoo's relative share of skier visits has steadily dropped as Mt. Bachelor's increased. The Willamette Pass Ski Corporation completed most of the Phase I development prior to the 1983-84 season. Its share of the skiing visits increased by 3.6% and Hoodoo's decreased by 3.1%.

Table IV-14

RETURN TO U.S. TREASURY

Alternatives	Annual Return (Based on Sales and Assets)	One-Time Return (Timber Sold to Construct Roads Ski Lifts and Runs)
I	\$18,250	\$109,863 ^{1/}
II	\$31,000	\$113,613
IIB	\$35,670	\$138,613
III	\$32,460	\$158,923
IV (Preferred Alter)	\$41,930	\$243,923
IVB	\$41,930	\$243,923
IVC	\$41,930	\$237,673
IVD	\$34,790	\$218,923
V (Will Pass Proposal)	\$45,210	\$253,923
VI	\$57,130	\$281,423

^{1/} Actual amount returned to U.S. Treasury from Phase I development.

TABLE IV-15
TRENDS IN DOWNHILL SKIER VISITS
CENTRAL OREGON, 1973-1985

Season	Willamette Pass			Hoodoo Ski Bowl			Bachelor			Central Oregon		
	Visits	% Change		Visits	% Change		Visits	% Change		Visits	% Change	
1973-74	5,596			82,155			205,315			293,066		
1974-75	7,111	+ 27		85,750	+ 4		262,064	+ 28		354,925	- 21	
1975-76	7,856	+ 11		57,902	- 32		311,488	+ 19		377,255	+ 6	
1976-77	closed	--		24,187	- 58		112,930	- 64		137,117	- 64	
1977-78	7,561	- 4		61,734	+155		367,638	+225		436,933	+219	
1978-79	6,390	-15		53,553	- 13		368,410	+0.2		428,353	- 2	
1979-80	closed	-		36,774	- 31		483,326	+ 31		520,100	+ 21	
1980-81	1,560	-76		5,724	- 84		523,449	+ 8		530,733	+ 2	
1981-82	6,973	+347		38,114	+566		518,743	- 1		563,830	+ 6	
1982-83	27,678	+297		45,138	+ 18		505,000	- 3		577,816	+ 2	
1983-84	49,972	+ 81		27,834	- 62		518,000	+ 3		595,806	+ 3	
1984-85 ^{1/}	54,315	+ 51		37,538	+ 63		344,802	+ 19		436,655	+ 26	

^{1/} Includes skier visits through February 1985.

% Change estimated by comparing skier visits for 1984-85 with same period in 1983-84 season.

Source: USDA Forest Service, Region 6, Recreation Visits

Table IV-16

RELATIVE SHARE OF CENTRAL OREGON SKIING OCCASIONS
FOR CENTRAL OREGON SKI AREAS, 1963-1984 (PERCENTAGE)

Season	Willamette Pass	Hoodoo Ski Bowl	Bachelor Butte
1963-64	10.9	27.7	61.4
1964-65	10.1	29.3	60.6
1965-66	9.9	26.6	63.3
1966-67	6.5	26.2	67.4
1967-68	5.8	38.9	55.2
1968-69	5.1	28.9	65.9
1969-70	5.3	34.4	60.3
1970-71	5.7	32.6	61.8
1971-72	4.2	34.3	61.6
1972-73	2.9	27.1	69.9
1973-74	1.9	28.0	70.1
1974-75	2.0	24.2	73.8
1975-76	2.1	15.3	82.6
1976-77	closed	17.6	82.4
1977-78	1.2	14.1	84.1
1978-79	1.4	12.5	86.0
1979-80	closed	7.1	92.9
1980-81	0.3	1.1	98.6
1981-82	1.2	6.8	92.0
1982-83	4.8	7.8	87.4
1983-84 1/	8.4	4.7	86.9

Source: United States Department of Agriculture, Forest Service,
Region 6, "Recreation Visits - Winter Sports."

1/ Estimate based on relative share of skier visits through February
1985 compared with same period in 1983-84 season.

Ski area management is another important variable. Note that overall, skier visits are up between 19 and 63 percent in the 1984-85 season compared with the same period in 1983-84. Both the 1983-1984 and 1984-85 seasons represent good snow years. Note that no new lifts or runs were added at Bachelor, Hoodoo, or Willamette Pass during this period. The increase in skier visits can be partially attributed to more effective management and marketing of the three ski areas. The major changes in facilities and management during the time are noted below:

- Bachelor

1. Raised lift prices from \$16.50 to \$18.00.
2. Actively promoted and marketed the area outside of Oregon.

- Hoodoo

1. Lowered lift prices from \$14.00 to \$10.50.
2. Added new ramps to chairlifts.

- Willamette Pass

1. Opened new base lodge.
2. Raised lift prices from \$12.00 to \$13.00.

The three ski areas in central Oregon draw on different markets.

In 1978 at the request of Hoodoo Ski Bowl, the Urban Planning Department of the University of Oregon conducted a survey of downhill skiers in the Central Cascades. The results, shown in Table IV-17, indicate that in 1978, 93% of the skiers from Willamette Pass come from within a 100 mile radius of the resort. This figure was only 70% for Hoodoo, and 31%

for Mt. Bachelor. Recent market information indicates that the Eugene/Springfield metropolitan areas make up approximately 8% of Bachelor's skier visits, 15% of Hoodoo skier visits, and 80% of Willamette Pass skier visits (personal communication with Hoodoo Ski Bowl, Inc., Mt. Bachelor Inc., and Willamette Pass Ski Corporation). It appears that Willamette Pass is still directed almost entirely to the Eugene-Springfield market, whereas Hoodoo draws from a wider area including the northern Willamette Valley.

Bachelor and Hoodoo Ski Areas view the recent proposed expansion of Willamette Pass as healthy competition (personal communication from Hoodoo Ski Bowl, Inc. and Mt. Bachelor, Inc., see letter from Ted Schafer). Any increase in the numbers of skiers will benefit all three areas. Management representatives state that the supply and demand for skiing in the Central Cascades has not been fully tapped.

In summary, further expansion of Willamette Pass Ski Area may have an initial negative effect on use at Hoodoo Ski Area. The projected decrease in use could be offset by better marketing, package deals, improving existing facilities, attracting new skiers, etc. as demonstrated during the 1984-85 season. Mt. Bachelor Ski Area continues to draw from a wide market in and outside of the State and will probably not be affected.

4. Public Demand For Skiing At Willamette Pass

Demand is defined as an individual's desire to participate in a certain activity and is

measurable. Note that "measured" demand is sometimes different than actual demand because it is based on the desire to participate rather than actual participation.

The projected demands for downhill skiing in the Willamette Pass Area over the next 15 years are included in Appendix D.

The projections make implicit assumptions or estimates about the major variables that affect the participation rate for downhill skiing. Each assumption and a discussion of its importance is included below:

Assumption: Snow conditions will be fair to good.

Discussion: Historic records suggest that at 5000 ft. elevation, snow conditions at the base area of Willamette Pass will be marginal one out of every 3 to 5 years. The Thanksgiving and Christmas holiday seasons are particularly important times for ski resorts. Skiable snow during this period usually results in a profitable season. Based on experience with ski resorts in Oregon and Washington, poor snow results in a decrease in skier visits at low elevation resorts such as Hoodoo and Willamette Pass; skier visits at high elevation resorts such as Bachelor generally remain constant.

Assumption: Hoodoo and Bachelor Ski Areas will not expand facilities.

Discussion: Adding new chairlifts and runs at Hoodoo, Bachelor, and Willamette Pass Ski Areas will attract skiers initially, although the excitement of new facilities may decrease over time. Market

studies suggest that customer services such as groomed slopes, nice base lodge, friendly lift attendants, short lift lines as well as price, snow conditions, etc. may be more important in keeping ski areas viable.

Assumption: Economic conditions in Oregon will gradually improve.

Discussion: Skiers generally come from families with discretionary income or those in the mid to upper income brackets. During national recessions, destination ski resorts experience a decrease in skier visits whereas skier visits at day use areas remain relatively constant. It is reasonable to assume that if extensive local or regional layoffs affected families in the middle (\$15,000 to \$25,000 per year) income brackets, skier visits at Hoodoo and Willamette Pass Ski Areas would decrease.

Other factors which could affect skiing activity at Willamette Pass Ski Area to a lesser extent include:

- New skiers coming from outlying areas (Roseburg, Klamath Falls, Coos Bay, Corvallis, Albany).
- Inactive skiers returning to the sport.
- Potential skiers inspired by friends or package deals.
- Current skiers dropping out.
- Increases in transportation costs.
- Increase in traffic and highway accidents on Highway 58

- Poor road conditions (snow and ice) on Highway 58.

On national as well as local level, ski sales and participation at ski swaps and shows indicate that interest in skiing is increasing (Povey, personal communication). Skiers dropping out of the sport are being replaced by inactive and/or new skiers; skier visits at Bachelor, Hoodoo, and Willamette Pass Ski Areas are up substantially in 1984-85 over previous years (see Table IV-15). Increased transportation costs could cause an overall reduction in skier visits in the Central Cascades; however, the proportion of skiers traveling to day use areas (Hoodoo and Willamette Pass) would probably increase. Poor road conditions, and to a less extent, heavy traffic, also tend to discourage skiing activity.

Two methods were used to calculate Lane County skier preferences for Bachelor, Hoodoo, or Willamette Pass Ski Areas. Method I is based on survey data collected at ski shops and at Willamette Pass by the Urban Planning Department, University of Oregon. Method II utilizes the actual number of visits during February 1984 and 1985 to determine preferences for skiing at the three areas. Skier preferences are then converted into site attraction multipliers. The projected number of skier visits at Willamette Pass Ski Area are indicated in Table IV-19 and in Table VIII-1 in Appendix D.

The demand projection provides a guideline to assess the public need or desire for more downhill skiing facilities in the Central Cascades. They also assist the permittee in evaluating the economic viability of the proposed

expansion. The projections are not intended to predict future use. The figures indicate the potential number of Lane County skier visits at Willamette Pass Ski Area through the year 2000.

5. Break-Even

A break-even analysis was prepared to examine the feasibility of the alternatives (Table IV-18). This analysis attempts to show the relation between the increased capital investment costs associated with additional facilities, operating costs, and projected increases in revenue. Assumptions on use levels (winter use only), revenue-per-skier visit, construction costs, and operation costs were the basis for the analysis. The analysis methods and assumptions used are described more fully in Appendix E.

The next step is to compare the projected demand for skiing at Willamette Pass to the economic break-even point for the various alternatives over the next 10 to 15 years. The comparison provides an estimate of the ski area's financial viability. The comparison of projected skier visits (based on demand calculations) to skier visits needed to break-even are shown for Alternatives I to VI for the years 1985-2000 in Table IV-19. The methods used to determine the demand projections are noted in Appendix D.

The following example will illustrate how the information in Table IV-19 can be utilized. If Alternative IV, the preferred alternative, is completely implemented (3 new lifts, access roads, nordic center and groomed trails, Summit Lodge, etc.), it

Table IV-17

PLACE OF RESIDENCE OF RESPONDENTS
BY USUAL PLACE OF SKI ACTIVITY
(PERCENTAGE)

Place of Residence	Usual Place of Ski Activity		
	Hoodoo	Bachelor	Willamette
Albany	9.3	4.7	0
Bend	0	24.6	1.8
Corvallis	18.0	7.6	0
Eugene/Springfield	34.9	23.4	80.4
Portland	2.9	16.4	1.8
Redmond	0	0.6	0
Salem	19.8	9.4	0
Other	15.1	13.3	16.0
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
	(172)	(171)	(56)

Source: Willamette Pass Master Plan

Table IV-18

SKIER VISITS NEEDED TO BREAK EVEN
(PER YEAR)

ALTERNATIVE	SKIER VISITS
I	78,050
II	93,230
IIB	100,650
III	93,890
IV (Preferred Alternative)	116,110
IVB and D	116,110
IVC	114,000
V (Willamette Pass Proposal)	120,090
VI	145,240

Table IV-19

COMPARISON OF PROJECTED SKIER VISITS (BASED ON DEMAND)
WITH SKIER VISITS NEEDED TO BREAK EVEN FOR 1985-2000

Alternative I

	Visits to Break Even	Projected Visits Method I Low	Projected Visits Method I High	Projected Visits Method II
1985	78,050	75,290	124,700	152,935
1990	78,050	81,125	134,364	164,785
1995	78,050	86,930	143,980	176,580
2000	78,050	92,850	153,780	188,600

Alternative II

	Visits to Break Even	Projected Visits Method I Low	Projected Visits Method I High	Projected Visits Method II
1985	93,230	73,290	124,700	152,935
1990	93,230	81,125	134,364	164,785
1995	93,230	86,930	143,980	176,580
2000	93,230	92,850	153,780	188,600

Alternative III

	Visits to Break Even	Projected Visits Method I Low	Projected Visits Method I High	Projected Visits Method II
1985	93,890	73,290	124,700	152,935
1990	93,890	81,125	134,364	154,785
1995	93,890	86,930	143,980	176,580
2000	93,890	92,850	153,780	188,600

Alternative IV (Preferred)

	Visits to Break Even	Projected Visits Method I Low	Projected Visits Method I High	Projected Visits Method II
1985	116,110	75,290	124,700	152,935
1990	116,110	81,125	134,364	154,785
1995	116,110	86,930	143,980	176,580
2000	116,110	92,850	153,780	188,600

Alternative V (Willamette Pass Ski Corporation Proposal)

	Visits to Break Even	Projected Visits Method I Low	Projected Visits Method I High	Projected Visits Method II
1985	120,090	75,290	124,700	152,935
1990	120,090	81,125	134,364	154,785
1995	120,090	86,930	143,980	176,580
2000	120,090	92,850	153,780	188,600

Alternative VI

	Visits to Break Even	Projected Visits Method I Low	Projected Visits Method I High	Projected Visits Method II
1985	145,240	75,290	124,700	152,935
1990	145,240	81,125	134,364	154,785
1995	145,240	86,930	143,980	176,580
2000	145,240	92,850	153,780	188,600

will require roughly 116,110 skier visits to break-even. The demand projections calculated using Method I (low) suggest that 86,930 skiers desire to visit Willamette Pass in 1995. This number is clearly less than the skier visits required to break-even. However, the demand projections calculated using either Method I (high)(143,980 skier visits) or Method II (176,580 skier visits) imply that the Willamette Pass Ski Area will break-even and make a profit.

It is clear that the anticipated ability to break even depends on which demand projections are used in the calculation.

There are two checks built into the system:

- 1) The Forest Service can manage the level of ski area development under any alternative by requiring the permittee to construct facilities in stages only after the need for such facilities is demonstrated. The permittee will be required to demonstrate: 1) a market need for additional facilities (based on updated used information and trends), 2) economic feasibility and 3) cash or assets to build and operate the proposed facilities.
- 2) The permittee will invest in new facilities only if there is a good chance of breaking even. New improvements will be put in place as a function of actual skier demand, perceived future markets and the ability of the permittee to finance and operate the development. (See Response to Comments from Willamette Pass Ski Corporation, number 3).

MITIGATION MEASURE

The above facilities are approved in concept. The timing and exact design and location of such facilities are subject to further review and analysis. The permittee will be required to demonstrate a market need for such facilities prior to construction.

6. General Effects on the Economy by Alternatives

Alternative I

- Short-term increase in construction. \$2.74 million in capital outlays to complete Phase I; \$5.48 million generated in secondary revenue.
- 103 employed persons during winter season. Most employees to come from local commuting area.
- Between \$500,000 and \$650,000 added to local communities.
- \$3.51 million in secondary revenue added to Crescent Lake, Oakridge, and Eugene-Springfield areas annually.
- \$18,250 returned to U.S. Treasury per year. A one-time return of \$109,863 generated from timber cut on building ski runs and lift lines.

Alternative II

- Short-term increase in construction. \$3.37 million in capital outlays; \$6.74 million generated in secondary revenue.
- 174 employed persons during winter season. Most employees to come from local commuting areas.
- \$4.20 million in secondary revenue added to Crescent Lake, Oakridge, and Eugene-Springfield areas annually.

- Dollars added to local communities (in excess of the \$650,000 generated under the No Change - Phase I Only Alternative) will be a function of secondary revenue generated by the expansion. The amount will depend on how private businesses respond to the increase in public demand for facilities.
- \$31,000 returned to U.S. Treasury annually. A one-time return of \$113,613 generated from timber cut on building sites, roads, runs, and lift lines.

Alternative IIB

- Short-term increase in construction \$3.95 million in capital outlays; \$7.90 million generated in secondary revenue.
- 217 employed persons during winter season. Most employees to come from local commuting area.
- \$4.53 million in secondary revenue added to Crescent Lake, Oakridge, and Eugene-Springfield area annually.
- \$35,670 returned to U.S. Treasury annually. A one-time return of \$138,613 generated from timber cut on building sites, roads, runs, and lifts.
- Dollars returned to local communities will be the same as II above.

Alternative III

- Short-term income in construction. \$3.37 million in capital outlays; \$6.74 million generated in secondary revenue.
- 182 employed persons during winter season. Most employees to come from local commuting areas.

- \$4.23 million in secondary revenue added to Crescent Lake, Oakridge, and Eugene-Springfield areas annually.
- Dollars added to local communities (in excess of the \$650,000 generated under the No Change - Phase I Only Alternative) will be a function of secondary revenue generated by the expansion. The amount will depend on how private businesses respond to the increase in public demand for facilities.
- \$32,460 returned to U.S. Treasury annually. A one-time return of \$158,923 generated from timber cut on building sites, roads, runs, and lift lines.

Alternative IV (Preferred Alternative)

- Short-term increase in construction. \$5.35 million in capital outlays; \$10.70 million generated in secondary revenue.
- 232 employed persons during winter season. Most employees to come from local commuting areas.
- \$5.22 million in secondary revenue added to Crescent Lake, Oakridge, and Eugene-Springfield areas annually.
- Dollars added to local communities (in excess of the \$650,000 generated under the No Change - Phase I Only Alternative) will be a function of secondary revenue generated by the expansion. The amount will depend on how private businesses respond to the increase in public demand for facilities.
- \$41,930 returned to U.S. Treasury annually. A one-time return of \$243,923 generated from timber cut on building sites, roads, runs, and lift lines.

Alternative IVB - Same effects as IV above.

Alternative IVC

- Short-term increases in construction. \$5.04 million in capital outlays; \$10.08 million generated in secondary revenue.
- \$5.13 million in secondary revenue added to Crescent Lake, Oakridge, and Eugene-Springfield areas annually.
- \$41,930 returned to U.S. Treasury annually. A one-time return of \$237,673 generated from timber cut on building sites, roads, runs and lift lines.
- Other effects are the same as IV above.

Alternative IVD

- \$34,790 returned to U.S. Treasury annually. A one-time return of \$218,923 generated from timber cut on building sites, roads, runs, and lift lines.
- Other effects same as IV above.

Alternative V (Willamette Pass Proposal)

- Short-term increase in construction. \$6.17 million in capital outlays; \$12.34 million generated in secondary revenue.
- 250 employed persons during winter season. Most employees to come from local commuting area.
- \$5.40 million in secondary revenue added to Crescent Lake, Oakridge, and Eugene-Springfield areas annually.

- Dollars added to local communities, (in excess of the \$650,000 generated under the No Change - Phase I Only Alternative) will be a function of secondary revenue generated by the expansion. The amount will depend on how private businesses respond to the increase in public demand for facilities.
- \$45,210 returned to U.S. Treasury annually. A one-time return of \$253,923 generated from timber cut on building sites, roads, runs and lift lines.

Alternative VI

- Short-term increase in construction. \$6.75 million in capital outlays; \$13.50 million generated in secondary revenue.
- 318 employed persons during winter season. Most employees to come from local commuting area.
- \$6.54 million in secondary revenue added to Crescent Lake, Oakridge, and Eugene-Springfield areas annually.
- Dollars added to local communities (in excess of the \$650,000 generated under the No Change - Phase I Only Alternative) will be a function of secondary revenue generated by the expansion. The amount will depend on how private businesses respond to the increase in public demand for facilities.
- \$57,130 returned to U.S. Treasury annually. A one-time return of \$281,423 generated from timber cut on building sites, roads, runs, and lift lines.

V. LIST OF PREPARERS

INTERDISCIPLINARY TEAM

<u>Name</u>	<u>Position/Discipline</u>	<u>Credentials</u>	<u>Experience</u>
Conny Frisch I.D. Team Leader	Resource Assistant Oakridge	BS Geology MS Geology	National Park Service - 2 years. Leasing Minerals Spec., Regional Office - 6 months. Energy Coord., Willamette N.F. - 2 years. Resource Assist. 2 years.
Dick Connelly	Logging Specialist Oakridge		Recreation 4 years. Assisted in planning and/or development of 4 major ski areas. Technical advisor to National Ski Assoc. - 2 years. Coach Univ. of Oregon ski team - 2 years.
Chris Jensen	Recreation Specialist Oakridge	BS Physical Geography	Ski Area Employee - 2 years. Recreation Spec. - 11 years with 6 years experience as Snow Ranger.
Doug Norlend	Waldo Wilderness Council	Senior in Planning, Public Policy, & Management	Organizer - Wilderness; advocate. Director, Survival Center.
Ron Rothschild	Assistant Recreation Staff, Willamette N.F.	BS English, Biology MS Recreation Management	National Park Service - 2 years. BLM Rec. Planner in Wyoming and Oregon - 10 years. Asst. Rec. Staff - 4 years.

V. LIST OF PREPARERS (Continued)

<u>Name</u>	<u>Position/Discipline</u>	<u>Credentials</u>	<u>Experience</u>
Jim Scott	Resource Assistant Crescent	BS Forest Management	Forester and Resource Assistant - 14 years; work in planning operations, recreation, special uses, range and wildlife, and watershed.
Chuck Solin	Outdoor Program Supervisor, Eugene Parks & Recreation	Associate Degree Oregon Institute Tech.	Instructed and worked in public recreation - 15 years. Eugene Outdoor Program for 6 years. Pres. Eug. Mtn. Rescue. Past Pres. Outdoor Section, Oregon Parks & Recreation Society. Past chairman, Water Safety Commission of Lane County. 1984 Outstanding Recreation Professional of the year.

OTHER INDIVIDUALS WHO ASSISTED IN PREPARATION OF THE EIS

<u>Name</u>	<u>Position/Discipline</u>	<u>Credentials</u>	<u>Experience</u>
Paul Claeysens	Archaeologist Oakridge	BS Anthro- pology, MS Anthropology, PhD candidate Anthropology	District Archaeologist - 4 years. Instructor U of O - 2 years. Research Assistant - 2 years.
Bill Dugas	Wildlife Biologist Oakridge	BS Resource Geog.	District Wildlife Biologist - 14 years.
Erin Ely	Forester Oakridge	BS Forest Management	Salv. Planning - 7 Months Fire Mgt. - 3 Months Presale - 3 Months Silviculture - Reforestation - 10 Months
Jim Greer	District Wildlife Biologist, Oregon Department of Fish and Wildlife	BS Wildlife Management	District Biologist - 10 years
Frank Hunsaker	Landscape Architect Willamette NF	BA Landscape Architec- ture and Environ- mental Planning	Landscape Architect - 18 years.
David Murdough	Zone Soil Scientist Oakridge-Rigdon	BS Soil Science	Hillsborough County Soil Cons. Serv. - 1 year. BLM Soil Scientist in Colorado and Montana - 4 years. Zone Soil Scientist - 4 years.
Dave Povey	Director Urban and Regional Planning Program, U of O	BS Political Science & Business Administra- tion. MS & PhD Urban & Regional Planning	Professor of Urban Regional Planning - 12 years, 1978 Master Plan, Hoodoo Ski Bowl 1980 Skier Demand & Economic Break-even Analysis, Early Winters 1980 Anthony Lakes Ski Area Development Plan,

OTHER INDIVIDUALS WHO ASSISTED IN PREPARATION OF THE EIS (Continued)

			1982 Economic Development Potential, Early Winters, Winter Rereation Development Plan for Willamette Pass, Economic Feasibility Analysis for Winter Recreation of Maiden Peak, 1983 Marketing Strategies Hoodoo Ski Bowl.
DeDe Twitchell	Biological Technician	BS Range Mgt. BS Wildlife Biology	Technician Range, Wildlife, Fisheries, and Biology - 2.5 years.
Rick Ullrich	Program Analyst Economist Willamette N.F.	BS Recreation MS Forest Administration Management Graduate work 3 yrs. Forest Economics	Washington Office Resource Planning - 1 1/2 years. Program Analyst, Economist - 5 1/2 years.
Jon Vanderheyden	Zone Hydrologist Oakridge - Rigdon	BS Forestry MS Forest Hydrology	Soil Mapping & Compaction Studies - 1 year. Timber Experience - 3 months. Zone Hydrologist - 5 years.

ACKNOWLEDGMENT

We would like to acknowledge the contributions of the following individuals: Dick Grace, Dick Buscher, Fred Isbell, Katherine Jesch, Gary Kahn, Hal Legard and Mike Morris (for their helpful suggestions and review comments), Marcia Ledbetter, Nancy Carson, Charlene Johnson, Melody Laughlin, Betty Nicholson (for their technical assistance) and many others for their indispensable help in preparing this document.

VI. LIST OF AGENCIES, ORGANIZATIONS
AND PERSONS TO WHOM COPIES OF THE
STATEMENT ARE SENT

FEDERAL AGENCIES

Agricultural Research Service

Agricultural Stabilization &
Conservation Service

Animal & Plant Health Inspection Service

Army Corps of Engineers

Defense Energy Environment & Safety

Delaware River Basin Commission

Department of Energy, Bonneville Power
Administration

Environmental Affairs

Environmental Affairs Division, General
Services Administration

Environmental Protection Agency

Explosives Safety Board

General Counsel Equal Employment
Opportunity Commission

Honorable Bob Smith, U.S. Congressman

Honorable Denny Smith, U.S. Congressman

Honorable Jim Weaver, U.S. Congressman

Honorable Mark Hatfield, U.S. Senator

Honorable Robert Packwood, U.S. Senator

Intergovernmental Relations Division

National Aeronautics & Space
Administration

Navy Environment Protection Div.

New England River Basins Commission

Occupational Safety & Health Admin.,
U.S. Department of Labor

Office of Architectural & Environmental
Arts Program, National Endowment for
the Arts

Office of Architectural and
Environmental Preservation, Advisory
Council on Historic Preservation

Office of Environmental Affairs, U.S.
Department of Health and Human Serv.

Office of Equal Opportunity

Office of Hazardous Materials, Federal
Railroad Administration

Office of Pipeline Safety, Federal
Railroad Administration

Office of Policy & Plans, Federal
Railroad Administration

Ohio River Basin Commission

PNW River Basins Commission

Policy & International Affairs, Office
of the Environment

Region 1, Forest Service

Region 10, Federal Highway Admin.

Region 10, Forest Service

Region 2, Forest Service

Region 3, Forest Service

Region 4, Forest Service

Region 5, Forest Service

Region 8, Forest Service

Region 9, Forest Service

Rural Electrification Administration

Science & Education Administration

Section of Energy & Environment,
Interstate Commerce Commission

Soil Conservation Service

State Conservation, Soil Conservation
Service

Susquehanna River Basin Commission

Tennessee Valley Authority

U.S. Air Force

U.S. Coast Guard

U.S. Department of Housing & Urban
Development

U.S. Department of the Interior

U.S. Navy

Water Resources Council

WestforNet - North

WestforNet - South

STATE AGENCIES

Department of Environmental Quality

Department of Fish and Wildlife

Executive Department

State Representative, Larry Hill

State of Oregon Clearinghouse

University of Oregon, Assistant Dean

University of Oregon, College of
Business Administration

University of Oregon, Forest Industries,

MBA Group

LOCAL AGENCIES

Association of Oregon Counties

City of Eugene

Deschutes County Board of Commissioners

Eugene Area Chamber of Commerce

Florence Area Chamber of Commerce

Lane Council of Governments

Lane County Board of Commissioners

Oakridge Chamber of Commerce

Springfield Area Chamber of Commerce

ORGANIZATION AND INDUSTRIES

Adams, Jas. Jeffrey, Attorney

American Institutes of Biological
Sciences

Archaeological Associates Northwest,
Inc.

Associated Oregon Loggers, Inc.

Big Mountain Towing

Boise Cascade Corporation

C. Gene Hand and Company

Cascade Holistic Economic Counsulate

Central Oregon Community College

College of Natural Resources

Colorado State University

Crescent Chevron

Dead Mountain Echo	Lively Livestock 4-H Club
Denver Public Library, Conservation Cent	Manley's Tavern
Eagles Nest Resort	Mazamas
Eugene Parks and Recreation	Midstate Electric Cooperative, Inc.
Eugene Register Guard	Nastar
Eugene Sand and Gravel, Inc.	Native Plant Society of Oregon
Federation of Western Outdoor Clubs	Natural Resources Defense Council
Forest Resources Library	Northwest Mining Association
Friends of the Earth	Obsidians
Fur Takers of America	Odell Lake Lodge
Gorman, Ron - Illustration & Design	Odell Lake Summer Home Assoc.
Halfway House	Odell Sportsman
Harris, B.L.	Oregon Archaeological Preservation Committee
Hett, Joan PhD	Oregon Environmental Council
High Prairie Log	Oregon Forest Protection Association
Home Fabrics	Oregon Natural Heritage Data Base
Industrial Forest Association	Oregon Natural Heritage Program
International Snowmobile Industry Association	Oregon Natural Resource Council
Izaak Walton League of America, Inc.	Oregon Nordic Club
Joe Romania Chevrolet	Oregon State University
Kelly, Edward	Pacific Northwest Ski Area Assoc.
Kittell, Chris	Penrose Memorial Library
KMTR	Portland State University
Lake County Library	Public Interest Research Group
Lane County Audubon Society	Scharpf's Twin Oak Builders Supply Co.
Lewis & Clark College	Schaudt, Stemm and Wild, Inc.

Shelter Cover Resort

Sierra Club

Sierra Club Legal Defense Fund

Sierra Club - Many Rivers Group

Sierra Club - Mary's Peak Group

Skeie's Jewelers, Inc.

Southern Cross

Stalick International, Inc.

Summer Home Assoc.

Tahoma Audubon Society

Tomic Golf & Ski Mfg., Inc.

ULLR Sport Shop

United Pipe and Supply Co., Inc.

University of Florida

University of Oregon

Waldo Wilderness Council

Washington State Horsemen, Inc.

Washington State University

Weather-Sphere, Inc.

Western Forest & Conservation
Association

Western Forest Industries Association

Western Wood Products Association

Wigwam Mills, Inc.

Wilderness Society

Wildlife Management Institute

Willamalane Parks and Recreation

Willamette Backcountry Ski Patrol

Willamette Beverage

Willamette Pass Ski Corporation

Wyatt's Tire Co.

INDIVIDUALS

Aasen, Stephen W.

Abedon, Bruce

Abernathy, Lil

Adam, Katherine

Adkins, Ron

Agerter, Paul D.

Alberty, Steven

Albertz, Barbara J.

Alspach, Collin

Anderson, David B.

Anderson, Ed

Anderson, Lester

Andreasen, Bob & Sharon

Andrews, David N.

Andrews, Jerome

Arnis, Matthew

Asbury, Ruth W.

Atack, David F.

Atwood, W.R.

Baker, Carroll Y.

Baker, Clifton E.

Balzhiser, Thomas A.
Barber, John L. Jr.
Barber, William
Barnes, Mr. & Mrs. Harvey D.
Bauer, Richard
Becker, Wesley C.
Berg, Dasp
Berg, Mr. & Mrs. William W.
Berg, William W
Bergreen, Peter W.
Bergsma, Audrey
Beutler-Abbey, Nancy
Bidleman, Faye L.
Bierman, Rita and Jerome
Blanchard, Gary W.
Bloker, Sherry
Bolander, Pete
Borgias, Kristofer
Bounds, Pat, Ronald and Robert
Bowerman, McKenzie
Bramwell, William
Brandt, Paul
Brandt, Peter M.
Briggs, Richard A.
Brinton, T.F. and Marion
Brock, Gayle

Brown, Dave
Brown, Kay Lee
Brunk, Gunter W.
Burgess, John C.
Burnett, Bob
Burris, Betty M.
Burris, John H.
Campbell, Gleen A.
Campbell, Margie K.
Cardinal, Roger J.
Carlstrom, David
Carver, John M.
Casady, Chris
Castellino, Bob
Chackel, Chuck
Chapman, Thomas B.
Christie, Michael
Churnside, Donald J.
Clark, Dick
Clark, Doug & Donna
Clarke, Dick
Clay, Steve
Cole, Paul B.
Collins, Kaye
Comstock, Keith
Connelly, Linda

Conway, Flaxen D.L.

Cook, Tom

Counts, Chris

Crawford, Richard F.

Cross, Hal M.

Curtis, Mike

Dandurand, Eugene

Dasso, Jerome

Davis, Bert

Davis, Dixon W.

Dayton, John J. Jr.

DeLong, Bob

Diehl, Mike

Dingman, Corey

Doehner, Thomas, A.

Dudd, Walt

Duncan, Richard J.

Dunlap, Larry

Eaton, Joyce

Eaton, Will

Edwards, Ted

Eggleston, Carol

Elsen, Barbara

Epplatt, Louis

Epplatt, Richard

Evers, Harold Jr. and Family

Ewing, Bert

Eyster, Edwin

Feldman, Kenneth N. and Lona L.

Ferreira, Bob

Fisher, Don

Fisher, Robert L.

Fix, Michael

Fjordbeck, Denise

Forbes, James and Christine

Fox, Judy

Fraser, Robert H.

Freemyer, Doug

Froyd, Shirley B.

Fults, Dan

Gabriel, Richard, Judith, Ian and Corey

Gallenstein, Jane

Garrison, Randolph Lee

Gattis, Mira

Gautier, Clay

Geis, Paul

Gengler, Linda

Ghient, Kenneth S.

Gietter, Ronald T.

Gillilan, Roderic W.

Glau, Bruce

Glines, Althea

Goddard, Aline C	Hansen, Howard
Graham, Bob	Harris, B.L.
Graham, Dan	Haugen, Janette
Greer, Barry	Hayes, Beverly
Greety, Catherine, Ms.	Hayward, John
Gregg, David	Heiden, James R.
Gregg, Susan	Heinzkell, Richard
Gries, Jerry	Hemphill, William J.
Gross, John	Henderson, James E.
Grosscup, Richard K.	Hendricks, Tom
Gruber, Gerald J.	Hendrix, Greg
Guckenberger, Kenneth E.	Henry, Charles T.
Gudden, Dolly	Henry, Jane
Guman, Paul	Herbert, Sydney
Guttormsen, Gary	Hermach, George R.
Hagberg, Christopher	Hett, Joan
Hagberg, Cicely	Hill, Donald H.
Hagberg, Liz I.	Ho, Leighton
Hagberg, Terry L.	Hoase, Fred D.
Hall, Vernon	Hock, Doreen J.
Hallstrom, Bill & Jane	Hodges, Thomas S.
Halterman, Loyd & Dorothy	Hoffman, Lewis
Hamilton, Emerson	Hohstrom, Lance
Hammer, J.P.	Holcomb, Michael S.
Hanley, Laurel	Huffstutter, Allen K.
Hansen, Craig	Hughes, George H.

Hughes, Lawrence V.
Hunsaker, Frank
Huntington, Lelefte
Irving, John W. & Family
Jarvis, Barry S.
Johnson, Vi
Johnson, Wayne L.
Jolley, Russ
Jone, Barbara
Jones, Darrell
Jones, Don Erwin
Jones, Michael S.
Jones, Robert
Jschersick, Hane
Kaufman, Mr. & Mrs. Heinz
Keigher, Peter
Kelley, Deanna
Kelley, Treva and Chuck
Kent, Gordon
Kilcullen, John F.
Kime, Robert
Kincaid, R.K.
Kingzett, Ed
Kinsbury Jr., G.C.
Kirbhart, James
Kline, Robert F. and Family

Kocher, John
Koenig, Daniel H.
Kohbn, Ed
Kortge, Dean R.
Kumm, Brad & Cheryl
Lafferty, Ralph F.
Lainoff, Michael
Larson, Darryl L.
Lashway, Lee
Lawler, Tom
Laxton's, The Walt
LeBrun, Rick
Lewis, Joe
Libke, Les, Betty and Kirk
Lilja, Richard
Linsdell, David
Littlejohn, Maria
Lock, Linda L.
Loe, Jack
London, Jackie
Loomis, Kendall D.
Love, Glen A.
Loveland, Patricia
Lovinger, Nena B.
Lowe, Matt
Lowry, Joe

Luvaas, John L.	Meyer, Ronald & Gertraude
MacDonald, Sheryl A.	Meyers, Jeff
Madsen, Jeff	Miller, Wally
Mahan, Sheila	Mitchell, Clifford
Makar, Carol & Kim	Mitchell, Curtin
Marquis, Lee	Mohr, Mary
Marsh, Richard & Eula	Molzen, Roberta
Martin, Gordon	Montoya, Diane J.
Martz, John	Morris, Greg
Mathews, Tom	Murdough, David
Maxer, B.B.	Mussine, Jack
Maxwell, Winston E.	Nelson, Keith
McAtee, Gary	Newcombe, Howard G. & Family
McCaffree, Bill	Newport, Carl A.
McCaskell, Bryan	Niemeyer, Brian
McClintic, Richard C.	Niquette, Doretta
McCully, Alton & Dorothy	Norberg, Russell L.
McCully, Diane	Nording, Don, Charlotte
McCully, George A.	Norlen, Doug
McGee, Dan	Norris, Larry
McGlasson, George	Novidz, David
McNutt, Mary Ellen	Orum, R. Marriner
McNutt, Michael	Parent, Wendy
Mehas, Art	Parker, Bruce E.
Mendez, Brooke	Parrish, Gary L.
Meyer, Alan D.	Pastor, Richard A.

Patchen, Ray	Roberts, Edgar N.
Perkins, Ken	Robinson, Matt
Perry, John C.	Robinson, Matthew
Perry, John L.	Robinson, Peggy
Pidgeon, Karen & Donald R. Wagner	Rodda, John & Rebecca
Piper, David A.	Ronning, Bruce
Pittman, S.E.	Ross, Ben
Plant, Helmut R.	Russell, Trevor & Vivian
Poppen, Mary & Bob	Rygh, John
Povey, David	Sargent, Edward C. M.D.
Pratt, Jack & Judy	Sawyer, Fred
Prichard, Dennis	Sceva, Christine
Puchaty, Don	Schroeder, Dave
Ramsey, Ed, Cathy, Steve & Scott	Schultz, M.
Ramsey, Taylor	Schulz, Walter L.
Randall, Linda M.	Schumacher, Bob
Rasmussen, Ray	Sciarretta, Thomas N.
Redmond, Arion	Scott, Jim
Redmond, Katherine	Scott, Malcolm & Jackie
Rexius, Russell	Seide, Curtis
Richards, Anita	Senders, Roger
Richards, Joe B.	Senger, Rocks L.
Riddle, J. Bruce	Sessler, Bonnie
Ritchey, Norval J	Sexton, Bob
Robbins, Lisa C.	Shaw, Robert L.
Robbins, Scott B.	Shekell, Peggy

Sherman, B.	Stephen, Roger A.
Sherman, Keith & Leroy	Stewart, Bradley c.
Sherman, Leroy F.	Stewart, L.L.
Sim, Dick	Stewart, Steve
Simon, Ronald L.	Stone, Joyce W.
Simpson, Barbara	Strand, J.
Simpson, Larry	Sweet, Jack
Sims, John L.	Talberth, John
Sinkowski, Jack	Talbertt, Jim
Sinkry, Bruce	Taylor, Chuck
Skakel, Susan	Taylor, Ed
Skelton, Brad C. & Laurel	Tepfer, Gary
Skelton, Steve M.	Tepfer, Sanford S.
Skillern, Bill	Terborg, James R.
Skillern, John	Theirl, William P.
Slusher, Skip	Thompson, Hale G.
Smeed, Glenn Jr.	Tilford, James P.
Smith, Arlan	Torgeson, Louis s.
Smith, Chris A.	Torrey, James D.
Smith, Helen	Tschersich, Hans U.
Smith, Neil	Tuttle, Paul
Smith, Roger F.	Utzinger, Don
Smith, Terry	Utzinger, Donald R.
Smith, Warren E.	Van Cise, Glenn
Sparks, Mr. & Mrs. David G.	Van Orman, Bill
Standafer, Caleb	Venner, Jim & Gail

Wakefield, Tim

Walker, Donald E. Jr.

Walker, Katherine E.

Walker, Kay

Walker, Larry

Ward, Virgil D. and Pauline M.

Warren, Robert D.

Weck, Jon A.

West, Mary Ellen

Whetham, Susan & J.D.

Whitman, Robert

Wigg, Jim

Wildman, A.J.

Wiley, William S.

Wiltse, Donald D.

Wisely, Floyd W.

Wittkop, Frederic C.

Wong, Susan

Wood, Jeff

Wright, Pete Mr. & Mrs.

Zakel, Jeff

Zustiak, Randy

VII. BIBLIOGRAPHY

- Bradley, W.P., History, Ecology, and Management of an Introduced Wapiti Population. In Vegetation, pp.12-15. University of Washington. 1982.
- Campbell, T.M., Short-term Effects of Timber Harvests on Pine Marten, M.S. Thesis. Colorado State Univ., Fort Collins. 71pp. 1979.
- Childs, T.W., Laminated Root Rot of Douglas-fir in Western Oregon and Washington. USDA Forest Service Research Paper PNW-102, Pacific Northwest Forest and Range Experimental Station, Portland, OR.
- Coulter, M.W., Ecology and Management of Fisher in Maine. Ph.D. Thesis. State Univ. Coll. of For., Syracuse University. 183pp. 1966.
- deVos, A., Overflow and Dispersal of Marten and Fisher From Wildlife Refuges. Journal of Wildlife Management, 15:164-175. 1951.
- Douglas, W.O. Fisher Farming Has Arrived. Am. Fur Breeder 16(2) 18-20. 1943.
- Franklin, J.F., and Dryness, C.T., Natural Vegetation of Oregon and Washington. USDA Forest Service General Technical Report PNW-8, Gold Lake Bog Research Natural Area, pp.GL1-GL4. Pacific Northwest Forest and Range Experiment Station. 1973.
- Grinnell, J.; Dixon, J.S. and Linsdale, J.M., Fur-bearing Mammals of California. Univ. California Press, Berkeley. 777pp. 1937.
- Hadfield, J.S., and Johnson, D.W. Laminated Root Rot: A Guide for Reducing and Preventing Losses in Oregon and Washington Forests. USDA Forest Service Pamphlet, 16 p. Pacific Northwest Forest and Experiment Station, Portland, OR.
- Hall, E.R. Gestation Period in the Fisher With Recommendations for the Animal's Protection in California. California Fish and Game 28:143-147. 1942.
- Hargis, Christina DD, and McCullough, Dale R. Winter Diet and Habitat Selection of Marten in Yosemite National Park. Journal of Wildlife Management. 48:140-146. 1984
- Hornocker, Maurice G. and Hash, Howard S., Ecology of the Wolverine in Northwest Montana, Canadian Journal of Zoology, Volume 59, 1981.
- Kelly, G.M., Fisher (Martes pennarti) Biology in the White Mountain National Forest and Adjacent Areas. Ph.D. Thesis. University of Massachusetts, Amherst. 178pp. 1977.
- Koehler, G.M. and Hornocker, M.G. Fire Effects on Marten Habitat in the Selway-Bitterroot Wilderness. Journal of Wildlife Management. 41:500-505. 1977.
- Krott, P., Demon of the North. Alfred Knopf, New York. (Translated from German by Edward Fitzgerald. 1959.
- Manion, Paul D., Fungi As Symbionts of Tree Roots: Mycorrhizal. In Tree Disease Concepts, pp 123-132. Prentice-Hall, Inc., Englewood Cliffs, New Jersey. 1981.

- Maser, C., Trappe, J.M., and Ure, D.C. Implications of Small Mammal Mycophagy to the Management of Western Coniferous Forests. Proceedings of the North American Wildlife Resources Conf. 1978.
- Maser, Z., Unpublished data. In Old Growth Update, p.3. USDA, Pacific Northwest Forest and Range Experiment Station, Portland, OR. 1984.
- Oregon Department of Transportation, Park and Recreation Branch, State Comprehensive Outdoor Recreation Plan (SCORP), 1975
- Pavlat, W. Willamette Pass List of Potential Sensitive Plants. USDA Forest Service, Willamette National Forest, Eugene OR. 1984.
- Powell, R.A., Hunting Behavior, Ecological Energetics, and Predator-Prey Community Stability of the Fisher (Martes pennanti). Ph.D. Thesis. University of Chicago. 132pp. 1977.
- Rausch, R.A., and Pearson, A.M. Notes the Wolverine in Alaska and the Yukon Territory. Journal of Wildlife Management. 36:249-268. 1972.
- Robart, Gregory P., Wolverine, Fisher Marten Sightings in Oregon 1973-1982, Supplementary Report.
- Salisbury, Frank B. and Ross, Cleon W. Absorption of Mineral Salts. In Plant Physiology, pp.64-78. Wadsworth Publishing Company, Inc., Belmont, California. 1978.
- Simon, T., An Ecological Study of the Marten in the Tahoe NF, California. M.S. Thesis, California State University, Sacramento. 107pp. 1980.
- Soutiere, E.C., The Effects of Timber Harvesting on the Marten. Ph.D. Thesis, University of Maine, Orono. 60pp. 1978.
- Spencer, W.D., Pine Marten Habitat Preferences at Sagehen Creek California. M.S. Thesis, University of California, Berkeley. 121pp. 1981.
- Spurr, Stephen H. and Barnes, Burton V. The Nutrient Cycle. In Forest Ecology, pp.211-250. John Wiley and Sons, Inc., New York, NY. 1980.
- Storm, R.M., Endangered Plants and Animals of Oregon; II. Amphibians and Reptiles, Agricultural Experiment Station Special Report 206, Oregon State University, 1966.
- Storm, R.M., Rare and Endangered Amphibians and Reptiles. Oregon State Game Commission Bulletin, December, 1971, pp.3-7, 1971.
- Strickland, M.A., Douglas, C.W., Novak, M., and Hunziger, N.P., Fisher. In Wild Mammals of North America, pp.586-598. J.A. Chapman and G.A. Feldhauser, ed. Johns Hopkins University Press, Baltimore, MD. 1982.
- Strickland, M.A., Douglas, C.W., Novak, M., and Hunziger, N.P., Marten. In Wild Mammals of North America, pp.599-612. J.A. Chapman and G.A. Feldhauser, ed. Johns Hopkins University Press, Baltimore, MD. 1982.
- Strickland, M.A., Douglas, C.W., Novak, M., and Hunziger, N.P., Wolverine. In Wild Mammals of North America, pp.644-652. J.A. Chapman and G.A. Feldhauser, ed. Johns Hopkins University Press, Baltimore, MD. 1982.

Trappe, J.M., Li, C.Y., Lu, K.C., and Bollen, W.B. Differential Response of Poria Weirii to Phenolic Acids from Douglas-fir and Red Alder Roots. Forest Science 19:191-196. 1973.

USDA, Forest Service, Deschutes National Forest, Land Management Plan, FEIS, 1978.

USDA, Forest Service, Federal Resource Natural Areas in Oregon and Washington - A Guide Book for Scientist and Educators, 1972; Pacific Northwest Forest and Range Experiment Station, Portland.

USDA, Forest Service, Plant Association and Management Guide for the Pacific Silver Fir Zone. Mt. Hood and Willamette National Forests, Pacific Northwest Region, 1982.

USDA, Forest Service, Visual Management System, Handbook 462.

USDA, Forest Service Willamette National Forest, Multiple Use Land Management, Timber, FEIS, 1978.

USDA, Forest Service, Willamette National Forest, Willamette Pass Ski Area Phase One Master Plan, 1981, 1982, 1983.

University of Oregon, Department of Planning, Public Policy and Management, Maiden Peak Ski Area Feasibility Study, 1982.

University of Oregon, Department of Urban and Regional Planning, An Analysis of the Current Potential Demand for Overnight Accommodations in the Willamette Pass Recreation Area, 1984.

University of Oregon, Department of Urban and Regional Planning, Willamette Pass Ski Area Master Plan, Department of Urban and Regional Planning, University of Oregon, 1983.

Wright, P.L., and Coulter, M.W. Reproduction and Growth in Maine Fishers. Journal of Wildlife Management. 31:70-86. 1967.

VIII. APPENDIXES

	Page
Appendix A: Glossary	85
Appendix B: Response to Public Issues	87
Appendix C: Wildlife Assessment	91
Risk Analysis - Wolverines.	97
Appendix D: Public Demand for Skiing at Willamette Pass . .	101
Appendix E: Break-even Analysis	107
Appendix F: Willamette Pass Area:	
Sensitive Plants Narrative	110
Zonal Vegetative Composition Narrative	111
Appendix G: Erosion Control	118
Appendix H: Public Comments:	
Scoping.	120
Summary of Unpublished Comments.	120
Response to Comments	129

APPENDIX A

GLOSSARY

Biota - The plant and animal life of the region.

Break-Even - The volume of skier visits per season required to meet all operating and cash expenses, excluding the cost of capital.

Class 1 Stream - Continuously flowing (perennial) or intermittent stream or segment thereof that is important for domestic water and/or fisheries resource.

Class 2 Stream - Continuously flowing (perennial) or intermittent stream or segment thereof that is important for fisheries resource.

Class 3 Stream - All other continuously flowing (perennial) streams or segments thereof not meeting higher class standards.

Class 4 Stream - All other intermittent streams or segments thereof not meeting higher class criteria.

Codominant - Trees with crowns forming the general level of the canopy or somewhat below; receiving full light from above but only moderate amounts from the sides; usually with medium-sized crowns, and more or less crowded on the sides.

Dominant - Trees with crowns extending above the general level of the canopy and receiving full light from above and partly from the sides; larger than the average trees in the stand; crowns well developed but possibly somewhat crowded on the sides.

Ecotone - A transition between two communities. It usually embodies some of the ecological features of the two communities, but has a characteristic ecological structure of its own.

Intermediate - Trees shorter than the preceding classes but with crowns extending into the canopy formed by the dominants and codominants; receiving some direct light from above but little from the sides; usually with small crowns, considerably crowded on the sides.

Modification - A visual quality objective defined as area where management activities may visually dominate the existing landscape. The scale of the activity is consistent with the natural landscape.

Mustelids - Mammals in the family Mustelidae. Those of the Pacific states include the marten, fisher, ermine, long-tailed weasel, mink, wolverine, badger, spotted skunk, striped skunk, river otter, and sea otter. They have in common short legs with five toes on each foot, fur of fine quality which is often very valuable, and scent glands which are frequently highly developed. The nostrum is short. There is one molar tooth on each side of the upper jaw and two molars on each side of the lower jaw.

PAOT - People at one time. This figure serves as a measure of the capacity of a ski area.

Partial Retention - A visual quality objective defined as area where management activities remain visually subordinate to the existing characteristic landscape.

Parturition - The action or process of giving birth to offspring.

Pathogen - An organism which causes a disease.

Permeability - A measure of the relative ease of fluid flow under unequal pressure.

Primitive - A recreation opportunity spectrum class which is characterized by an unmodified natural environment.

Retention - A visual quality objective defined as area where management activities are not visually evident.

Roaded Natural - A recreation opportunity spectrum class characterized by a moderately natural appearing environment.

Rural - A recreation opportunity class which is substantially modified from the natural.

SAOT - Skiers at one time. This figure serves as a measure of the capacity of the slopes and ski runs. It is assumed that the SAOT is 85% of the PAOT and that 85% of the people visiting Willamette Pass Ski Area will ski.

Scoping - A process used to determine scope of issues to be addressed and for identifying the significant issues related to a proposed action (40 CFR 1501.7).

Semi-Primitive Nonmotorized - A recreation opportunity spectrum class which has a predominately natural appearing setting.

Site Attraction Indicator - The relative share, in percent, of the total participation that takes place at a particular site.

Snow Grooming - Or farming is the compacting, blading, and tilling of the snow surface by a snowcat with manicuring attachments.

Suppressed - Trees with their crowns entirely below the general canopy level; receiving no direct light from above or from the sides.

APPENDIX B

RESPONSE TO PUBLIC ISSUES

A. RECREATION

1. How might expansion proposal effect the integrity of adjacent undeveloped areas?

Response: Alternatives III, IV, V and VI propose facilities on the north slopes of Eagle and/or West Peaks. Implementing these alternatives would alter the existing unroaded nature of the immediate area. However, over 35,000 acres of undeveloped area would be retained. The environmental consequences section outlines in detail what effect implementation will have on the soil, water, visual, noise, wildlife and vegetative resources. The proposed facilities are consistent with the area allocation to potential winter sports development as identified in the 1978 Willamette Timber Management Plan.

2. How might the expansion effect cross-country skiers, hikers, backpackers, and others who currently use the area?

Response: The expansion alternatives (II to VI) allow for continued summer and winter use of existing trails. Implementation of these Alternatives will effect the user's experience level. For example, the expansion alternatives provide for a wider variety of cross-country skiing opportunities to the public. Groomed nordic tracts would attract more skiers. However, there would be a charge for cross-country skiing on a maintained track. Nordic skiers who enjoy off-trail skiing and/or who are unwilling to pay would be displaced. Cross country skiing on existing Forest Service trails would continue at no cost.

3. What effect might the expansion have on the Pacific Crest National Scenic Trail?

Response: See section on public demand in chapter on environmental consequences and Appendix D.

Alternatives III, IV and V propose relocating the PCNST to the north ridge between Skyline Creek and Maiden Peak which would bypass the expansion area and retain the semi-primitive experience now associated with it. This location offers scenic views of Rosary Lakes and Maiden Peak. At one point the D lift line and some runs may be visible from the trail. The overall effect on visual quality would be negligible. Relocation costs would be paid for by the permittee. Annual maintenance would be the same (cost=\$467/ year). Under the maximum development alternative (VI), the PCNST would pass near the lift D terminal. Annual maintenance (cost=\$467/year)

4. What is the public demand for more winter sports development?

Response: See Table displaying low and high demand projections over time.

5. How might the expansion effect the quality of ski facilities (lifts and runs), and services (ski racing, ski schools, etc.)?

Response: See alternatives for a description of facilities and services.

6. How might the expansion proposal ensure better skiing conditions?

Response: Ski runs on north-facing slopes and above 5,500 feet elevation will provide more consistent and higher quality snow, and may ensure better snow conditions during drought years.

7. What provision does the expansion have for nordic facilities such as groomed cross-country trails?

Response: All the expansion alternatives (II-VI), provide for a nordic center, and groomed cross-country tracks.

8. What effect will the expansion proposal have on overnight accommodation for skiers in the area?

Response: Based on the data from 1981-1983, the demand for overnight winter accommodations at Willamette Pass will increase over the next ten years from an estimated 4696 to 5641 overnight visitors (University of Oregon study, 1984).

9. What summer activities might be available at Willamette Pass?

Response: The following summer activities are proposed: Recreational vehicle lodging for 30 RV units, summer chairlift rides, an outdoor amphitheater, and restaurant and overnight accommodations (Alternatives V and VI only).

B. TRANSPORTATION

1. What effect might the expansion have on the capacity of Highway 58?

Response: Traffic counts on Highway 58 average 2300 vehicles/day. Based on conversations with the Oregon State Highway Department, it is estimated that Highway 58 can accommodate up to three times the existing capacity (3215 PAOT), of the Willamette Pass parking lot or approximately 9645 PAOT.

2. What effect might the expansion have on snow plowing of the parking lots? Are the proposed parking facilities adequate?

Response: The Willamette Pass Ski Corporation recently purchased equipment to plow snow from their lots. Parking facilities are described under the alternative descriptions..

C. SAFETY

1. What effect might the proposal have on skier safety? snow play safety?

Response: All ski lifts as well as buildings and support facilities must meet standards set by the American National Standards Institute (ANSI), as well as State and County regulations. Runs and intersections will be constructed and marked to ensure skier safety.

Snowplay is considered unsafe and is not sanctioned by either the permittee or the U.S. Forest Service. The upper slopes of the parking lot will be banked to reduce or eliminate accidents in the vicinity of the parking lot.

2. What effect might the expansion have on the security of homes at Odell Lake?

Response: There will be an increase in visitors in the area. No significant increases in vandalism are anticipated.

D. ECONOMIC

1. What might be the economic effects on areas residents? on local communities?

Response: According to a recent University of Oregon study, overnight accommodations, food, gas, gifts, and other forms of recreation generate a considerable amount of income for the economy of the Willamette Pass area. It is estimated that the total income generated by overnight visitors could exceed \$500,000 by 1985 and \$650,000 by 1995 - under the No Change - Phase I only alternative.

If expansion occurs, additional dollars contributed to local communities will be in proportion to the secondary revenue generated. The actual amount will depend on how private businesses respond to the increase in public demand for facilities.

2. Is the proposed expansion economically feasible?

Response: See discussion on break-even in section on Economic Effects.

3. What effect might the expansion have in the Eugene-Springfield area?

Response: See estimates of secondary revenue for each alternative in section on Economic Effects.

4. What effect might the expansion have on economic diversification in the Eugene-Springfield area and Lane County?

Response: Expansion of the Willamette Pass Ski Area will add to the economic diversification of Lane County.

5. What effect might the expansion have on returns to the U.S. Treasury?

Response: See estimates of returns to U.S. Treasury for each alternative in section on Economic Effects.

E. VISUAL RESOURCES

1. How might the expansion effect the visual quality of Waldo, Gold and Odell Lakes? and the Pacific Crest National Scenic Trail?

Response: See section on effects on visual resources which includes perspective plots which simulate visual effects of ski lifts and runs as seen from Waldo, Gold and Odell Lakes, Mt Ray, Mt. Fuji and Maiden Peak.

See response to issue 3 A. for visual effect on the Pacific Crest National Scenic Trail (PCNST).

F. VEGETATION, WILDLIFE, SOIL AND WATER RESOURCE

1. What effect might the project have on existing wildlife habitat? What species might be affected?

Response: See the description of the environmental consequences on soil, water and wildlife resources under each alternative.

2. What effect might the project have on soil and water resources? What might be the effect on the Gold Lake Bog?

Response: See the description of the environmental consequences on soil, water and wildlife resources under each alternative.

3. What effect might expansion have on the vegetation? What species would be effected? What is its commercial value?

See the description of the environmental consequences on vegetation and economics.

G. WASTE DISPOSAL

1. What type of sewage disposal system is needed to handle the anticipated increase in use?

Response: The base area includes the day lodge, ski school, ski patrol, and maintenance buildings. The Willamette Pass Ski Corporation has submitted plans for sewage disposal in this area to Oregon Department of Environmental Quality for an intermittent recirculating sand filter unit. The system is designed for an average daily flow of 12,500 gallons per day. Assuming 7.5 gallons of sewage per person per

day, this system is designed to handle 1,670 people a day. On weekends and holidays the sewage flow from the lodge and other facilities served by the sand filter is likely to exceed 12,500 gallons per day. There is a 36,000-gallon surge basin ahead of the filter to temporarily store this excess flow. Then, during the week when the flow to the filter is usually well below 12,500 gallons per day, the excess flow is treated. With this arrangement the flow passing through the filter can always be kept at or below 12,500 gallons per day. The sewage system (sand filter plus surge tank) can accommodate over 8,300 skiers per day. The filter unit and surge tanks are constructed of concrete below existing ground level on four sides, covered and insulated for cold weather conditions.

The Summit Lodge is planned to accommodate 426 SAOT. Detailed engineering diagrams will be submitted to the Forest Service and appropriate State and County departments. Prior to construction, permits for sewage disposal and construction must be obtained from the Oregon Department of Environmental Quality.

2. What provisions might be made for solid waste disposal?

Response: Solid waste will be taken to acceptable disposal site on a regular basis.

H. NOISE AND LITTER

1. How might noise due to operating chairlifts and grooming equipment affect nordic skiers in the area?

Response: See discussion on Environmental Consequences chapter on noise.

2. Are electric chairlifts economically feasible?

Response: See discussion under Effects on Water.

3. Would litter on the north slopes increase as result of expansion?

Response: The permittee will be required to pickup litter after each winter season.

I. PUBLIC INPUT

1. Will there be additional public involvement?

Response: The public has 60 days to respond to the Draft Environmental Impact Statement. There will be an opportunity for additional public input on the exact location and design of the Summit Lodge through the environmental analysis process.

APPENDIX C

WILDLIFE ASSESSMENT

WILLAMETTE PASS SKI AREA EXPANSION

The proposed development at Willamette Pass has the potential to affect a variety of wildlife habitats. Impacts to wildlife may range widely from positive to negative, depending on the species and type of activity proposed. Animals likely to be affected will be discussed, and constraints and mitigations needed to moderate impacts of the various alternatives will be suggested.

BIG GAME

The project area is used as summer range by Roosevelt elk, blacktailed deer, and probably mule deer. Winter range for blacktails and Roosevelt elk is probably located in the Black Creek area of Salmon Creek and the Verdun-Eagle Creek vicinity of Salt Creek. Deer and particularly elk, are commonly observed in the existing ski area during spring and summer. Ski area personnel report that elk often cross the main "By George" run on the bench near the intermediate off-load. Some travel occurs along the ridgelines north and west of Eagle Peak summit, but use above 6500 feet elevation appears to be limited primarily to spring and early summer.

A field trip in early August, 1984, revealed a number of big game use patterns. This inventory covered the ridgeline in Sections 4 and 32 and the bench in Section 33 to about 6200 feet elevation. Use was light on the ridgeline proper, and most sign observed was of deer. Use intensified greatly in the saddle at the northwest corner of Section 4, and most notably involved a large, well-used travelway oriented southwest/northeast across the saddle. For about 500 feet downslope of the saddle, the travelway bears generally

south, and probably accesses some natural openings and eventually reaches the crossing noted above of the "By George" ski run. Tracks in the travelway, both elk and deer, appeared no more than a week old. Substantial recent browse was noted on the low huckleberry, and numerous earlier excavations by deer for fungi were observed in the saddle and about 200 feet upslope. (Incidentally, the saddle is the location of the proposed Summit Lodge).

A large bench (30-40 acres) lies downslope to the northeast of the saddle, and elk use was heavy. Tracks and sign were old; most tracks were made when soil was soft and wet, and droppings exhibit the "cow pie" form characteristic of elk in the spring.

Another field trip was made on August 9, from Gold Lake to the vicinity of Douglas Horse Pasture. Heavy elk use was noted at Gold Lake Bog and Douglas Horse Pasture. Recent elk sign was observed near most riparian and wetland situations. Several large travelways cross trail #3881; the two largest are located near the section line between Sections 31 and 32, and in the NE 1/4, SW 1/4, Section 29, near the 5100 foot elevation point. Most travelways appear to connect the open lodgepole flats in Sections 31 and 29 with the Gold Lake/marsh complex.

Deer use was heaviest in the open lodgepole stand. Much recent sign was noted and travelways were encountered every 100-200' along an overland east-west route between Douglas Horse Pasture and trail #3881.

It is likely that cougar and black bear also occur in the proposed expansion area. No sightings are on file and no sign was noted during field trips into the area. However, both animals,

especially the cougar, are oriented to ungulate concentrations, and probably utilize the areas noted above.

BIG GAME CONSTRAINTS/MITIGATION

Overall impacts on big game habitat will vary. All proposed alternatives, except I, should have the effect of improving forage production. The narrow nature of ski runs should ensure good utilization of forage produced as animals need not move far from cover to feed. Also, required erosion control measures should greatly increase the quality of forage plants in the openings. On the other hand, opening the canopy generally reduces the production of fungi, i.e., mushrooms, lichens, etc., which animals use heavily in the spring time.

The second factor affecting big game is that of increased human activity and its potential to disturb the animals and displace them from their accustomed use patterns. Since big game are not in the area during the recreation season, the primary disturbance potential will arise from construction periods and normal maintenance thereafter. The key time frame here would encompass spring and early summer. Lifts D, E, F, and G and their attendant access roads are all located in high use areas for this season. Animals will likely be displaced during the course of timber harvest and construction done during the months of June and early July. Post-construction use will depend on the amount of maintenance traffic and activity.

Besides feeding in artificial openings, big game would probably find easy traveling on service roads if traffic is light. Elimination of public use on service will be necessary to reduce displacement of big game, and

restriction of official vehicular travel to the minimum amount feasible will help further.

Some of the proposed alternatives will impact big game more heavily than others. This relates particularly to Alternatives 4, 5, and 6 which all propose to build the Summit Lodge. As noted above, the lodge is proposed for a flat saddle which currently provides a trail corridor and substantial early summer forage. There can be no doubt that big game use of the area will decrease, due to constant presence of human activity and the necessary clearing which will reduce natural browse and fungi production. Placement of the lodge as far to the northwest of the saddle as possible could reduce the impacts significantly. A distance of 200-300 feet would leave the flat portion relatively undisturbed. This would increase the likelihood of continued utilization of the travelway and reduce the impact on a preferred forage area. The northwest side of the saddle is rockier and drier, and there was little evidence of animal use there. A second area which could be negatively impacted in the flat bench northeast of the saddle. Lift E and its attendant runs pass through this site and could change its micro-environment to the extent of discouraging its use by elk. The risk would be alleviated by choosing an alternative which does not build Lift E, or by reducing the number of runs which transect the flat.

FURBEARERS

Three species of furbearing mustelids are likely to use the area of the proposed ski area expansion. These are the wolverine, the fisher, and the marten. Of these, the wolverine is considered threatened by the Oregon Department of Fish and Wildlife (ODFW), and the fisher is considered to be rare. All are classed to varying degrees as

"wilderness-oriented" animals, with the wolverine exhibiting the most stringent habitat requirements. The wolverine was believed extirpated in Oregon by the mid-twentieth century; however, the species was confirmed by a hunter-kill north of the Three Sisters in the mid-sixties. Since then, more than 60 sightings and discoveries of sign have been noted throughout the Cascades and parts of the Blue Mountains. According to data provided by Oregon Department of Fish and Wildlife, there has been wolverine sign located by a reliable trapper within 2 to 6 miles of the proposed expansion during the early 1980's. Donald Utzinger of Portland State University, who is initiating an inventory of wolverine and their habitat in Oregon, reports wolverine tracks in the winter of 1984 in the Gold Lake area. The wolverine is a wide-ranging animal (yearly movements in Montana average 150 to 160 square miles), with considerable overlap between individuals. There is little doubt that the Willamette Pass Ski Area and the proposed expansion comprises a portion of the territory of at least one and possibly several wolverines.

Mr. Utzinger asserts in his research proposal that current knowledge of wolverine habitat requirements and distributions is insufficient to base policies necessary to adequately protect the species. He states further that the "...ever-increasing use of possible wolverine habitat for recreational, commercial, and developmental purposes may well lead to this species second extinction in Oregon." It is unfortunate that Mr. Utzinger's study was not completed this year, rather than only started. Consequently, our knowledge of the species in the Cascades is extremely sketchy, and we are forced to base management decisions on ecological information extrapolated from other areas and studies. Significantly,

habitat conditions may differ considerably from these we are dealing with in the vicinity of Willamette Pass (Hornocker and Hash, 1981).

Most studies reported in the literature agree on several salient points regarding the wolverine and its habitat. They are wide-ranging, mainly nocturnal, and active year-round. They are territorial, but generally non-combative within their species. They are highly oriented to feed on carrion, and can locate such food even under deep snow packs. In Montana, their distribution appears to be related to large herbivore populations, which are also significant in the Willamette Pass area. They also prey on a wide variety of small mammals from snowshoe hares to deer mice.

The Montana researchers state flatly that "wilderness or remote country where human activity is limited appears essential to the maintenance of viable wolverine populations." There are no references in the literature to effects of ski area activity on wolverines, but some degree of negative impact to wolverine habitat and use patterns would appear inevitable in the case of the proposed expansion. If the Willamette Pass area is, in fact, part of a wolverine's home range, it is likely that the increased human presence during the winter, coupled with noise generated by grooming and lift machinery would combine to remove the actual ski area and some distance around it from the animals' effective habitat base.

At this time, we lack the knowledge to adequately gauge the depth of this impact to the animal. Further, we can only speculate on means by which impacts could be mitigated or minimized. Since the animal is wide ranging, the proposed expansion would probably affect only a small percentage of its range. However, we have no hard data relating significance of this portion to the total habitat unit. It would seem that

big game concentration areas, especially late summer and fall would be especially important. These would tend to provide carrion sources through the critical winter period. Carcasses entering the system any earlier in the season would probably decompose substantially before being covered by snow. The late-winter/spring big game concentration would be important in that most carcasses would be contributed to the system during this time due to winter weakening. Also significant would be small natural openings and talus which the wolverine uses as rodent/rabbit sources. (Hornocker and Hash, 1981)

The proposed expansion would directly affect some spring concentration areas for elk, such as the area near Lift E. Several rock outcrops would be near or within the expansion, and considerable gopher castings were noted along the ridgeline route of the road to the Summit Lodge. (Since gophers are active under the snow in winter, they could be a significant prey item).

We have information that wolverines use the Gold Lake area in winter, and most likely the Douglas Horse Pasture marsh/creek complex. As noted earlier, these are important summer concentration areas for big game. We have no way of evaluating potential impacts to wolverine use of these areas. There would probably be some noise evident from the expansion, and increased winter trail use by cross-country skiers could have some impact.

In summary, we can probably anticipate reduced use by wolverines in the immediate vicinity of the expansion, but since the area encompasses roughly $1\frac{1}{2}$ square miles, the overall impact on an animal with a 200 square mile territory remains inconclusive, and may be minimal. Additional impacts including the Gold Lake - Douglas Horse Pasture area could be much more significant.

Conversely, the increase in vegetative diversity and forage production could have a beneficial effect on big game and rodent/rabbit populations. An overall increase in the prey base of the area could improve the lot of resident wolverines, if they were still inclined to use the vicinity of the proposed expansion.

There is also the factor of the recent addition of 39,000 acres of the Waldo area to the wilderness system. This will preclude timber harvest on many acres that would have been lost as wolverine habitat, such as the Fisher Creek-Moolack Mountain area. This significant positive development could be weighed against the possible losses in the ski area expansion.

Obviously, where the wolverine is concerned, we're operating in ignorance. We're probably going to lose something, but it's impossible at this point to determine how much, when we don't even know how many animals we have, or where they range.

A second furbearer found in the Willamette Pass area is the fisher. The fisher resembles a large mink (30 inches nose to tail), and is famed for its' ability to dine regularly on porcupines. Several timber companies have spent many dollars to reintroduce fisher in the Cascades, mostly on the Umpqua National Forest. Results are inconclusive, mainly due to the animals' secretive nature. Fisher are classified as rare in Oregon by the ODFW. Their sign has been noted by trappers in the Willamette Pass Area in the early 1980's, at Gold Lake, Davis Lake, and north of Diamond Peak. Fisher home range is ten square miles or less, and they are oriented to coniferous forest and riparian situations. They tend to avoid areas without overhead cover. They appear to be more adaptable than the wolverine, but there is little evaluation in the literature of their

propensity to coexist with man and his activities. Primary detrimental effects of man on fisher appear to be direct mortality by trapping. Evidence indicates that fisher, although protected in Oregon, could be susceptible to mortality by incidental catch in traps legally set for marten. Heavy winter recreational use of an area such as Willamette Pass would seem likely to discourage trappers due to the trap disturbance/vandalism factor.

A third mustelid which could be affected is the marten. Their requirements are similar to the fisher. They are oriented to mature timber, preferring a 40 to 60% canopy, and avoiding areas with less than 30% closure. They are solitary, mostly nocturnal, and active year-round. Their prey base is oriented to rodents found in or at the edge of mature timber, such as redbacked voles, Douglas squirrels, flying squirrels, snowshoe hares, and pikas.

They are generally incompatible with intensive timber harvest, but their habitat can be improved by small, scattered clearcuts. Slash piles, stumps, and down logs provide them with an increased prey base, as well as high quality den sites and travel corridors. Trapping data from ODFW indicates marten are present from the Rosary Lakes west into the existing Willamette Pass Ski Area. There are also abundant trap records from the Gold Lake area, North Waldo, Fuji Meadows, and south of Odell Lake.

It would appear that martens and their habitat would be generally compatible with the proposed development. There would probably be some winter displacement from the immediate activity area, but as in the case with fisher, this may be compensated for by a probable reduction in trapping effort. Since openings for ski runs will be generally less than 100 feet wide, their use by foraging martens will probably continue

after expansion. Prey rodent habitat and den opportunities for the marten could be improved by deliberately leaving slash piles and cull logs just into the timber at the edges of the runs. If cull logs and slash would not interfere with the runs themselves, their retention within the runs could improve marten utilization of the openings in summer.

Overall, it appears the marten will probably be somewhat compatible with the expansion. The only substantial impact might be loss of some ridgetop travelways to the lodge access road and some of the ski runs.

THREATENED, ENDANGERED AND SENSITIVE ANIMALS

The only federally threatened or endangered species using the vicinity are the bald eagle and possibly the peregrine falcon. Bald eagle use is common around the high Cascade Lakes, and has been documented around Odell and Gold Lakes. This use appears to be primarily foraging, and there are no records of nesting or established roosts near the Willamette Pass Ski Area. Such use is possible, however, and should be monitored on a continuing basis.

There are no known records of foraging or nesting by peregrine falcons near Willamette Pass in recent times. Nesting would be unlikely due to a dearth of cliff habitat with the requisite horizontal ledges.

There is a spotted owl management area (SOMA) immediately west of the expansion area. The nest grove for this pair of birds is believed to be west of Gold Lake. Owl habitat adjacent to the proposed expansion is sub-optimal, characterized by sparse open-crowned stands of true fir and lodgepole pine. Consequently, no impacts on the owls are anticipated.

WILLIAM M. DUGAS
Wildlife Biologist
August 28, 1984

Literature cited: Hornocker, Maurice G. and Hash, Howard S., Ecology of the Wolverine in Northwest Montana, Canadian Journal of Zoology, Volume 59, 1981.

RISK ANALYSIS: WOLVERINE AND PROPOSED
SKI AREA EXPANSION

On November, 6, 1984, Conny Frisch and Bill Dugas of Oakridge Ranger District met with Jim Greer, District Biologist for Oregon Department of Fish and Wildlife (ODFW), to accomplish a risk analysis of the potential effects of the proposed Willamette Pass expansion on wolverines. Several questions were addressed in preparation for the risk analysis.

Question One: "What do we know about wolverines?"

-- Most available knowledge of the wolverine is based on studies in Alaska and in Montana in the late 1970's.

-- Most Oregon Cascades information is in the form of track sightings and trapping records.

-- Track sightings in Willamette Pass Area (winter):

1. Gold Lake Bog - 1984
(by Don Utzinger)
2. Mt. Ray Trail - Dave Walp (Trapper)
3. Six miles east of Willamette Pass

-- Visual sightings are infrequent. Mostly in Three Sister vicinity.

-- One shot near Three-Fingered Jack in 1960's.

-- Bob Jubber, ODFW, observed a wolverine between Waldo Lake and Maiden Peak in 1972.

-- All studies agree that they are wide-ranging animals.

-- Studies by Hornocker and Hash (1981) in Montana estimate 150 to 160 square miles.

-- Range may be as small as 60 square miles in winter.

-- Appear intolerant of man and his activities.

-- Wilderness oriented.

-- May be able to survive with marginal amount of human activity. In Alaska, wolverines are known to break into trap lines and cabins.

-- Wolverine populations related to presence of big game animals.

-- Feed mainly on carrion (dead big game animals).

-- In winter, wolverines can locate and dig through four feet of snow to find carrion.

-- Also hunt for rodents.

-- Appear reluctant to cross large openings in Montana.

-- Territories in Montana overlap with no sign of intra-specific conflict.

-- Observations since 1960 indicate that the highest concentration of wolverines in the State of Oregon may be in the Central Cascades.

-- They are solitary, secretive. Very little is known about them.

-- They are highly vulnerable to trapping due to high response to baits.

- They are listed as a threatened species in the State of Oregon and are protected.
- The Montana study estimated one wolverine per 25 square miles on the study area.

Based on the above information, several assumptions were made regarding wolverines in the Willamette Pass Ski Area and vicinity.

-- ASSUMPTION: Gold Lake Bog and Douglas Horse Pasture are probably high use or key areas due to their heavy use by big game animals.

-- ASSUMPTION: Territory of wolverine currently using Willamette Pass vicinity may not extend south of Highway 58 due to existing developments and winter activity in Odell Lake-Willamette Pass areas.

-- ASSUMPTION: There could be two animals using Gold Lake Bog/Waldo Basin area. The next heavy big game concentration to the north is at Moolack Lake/Skookum Swamp in what is now wilderness and consequently should remain viable wolverine habitat.

-- ASSUMPTION: There may be two to four wolverine territories between Highway 58 and the Three Sisters area.

Question Two: "What Do We Not Know About Wolverines?"

1. The population and territory of wolverines in the Willamette Pass vicinity.
2. The actual amount of human disturbance that will affect wolverine use of their territory.

3. How critical is the production of deer/elk forage in the area to the maintainance of a wolverine prey base.
4. The relationship between increased big game forage due to ski run development to the potential of decreased wolverine use due to human activity.
5. Will Don Utzinger's (graduate student at Portland State University) proposed study answer these questions?
6. The State of Oregon's responsibility in protecting state threatened and endangered species not on the federal threatened and endangered list.

Question Three: "How might the wolverine be affected by ski area expansion?"

Wolverine Displacement From Preferred Habitat

-- ASSUMPTION: Douglas Horse Pasture is only $\frac{1}{4}$ to $\frac{1}{2}$ mile from the expansion area with no topographic break to reduce noise, and wolverine use would probably be eliminated during the winter.

-- A line of influence from ski area expansion would run along the 5200 foot contour above Gold Lake around to the existing Skyline Trail. This would remove about three square miles from the effective wolverine habitat base, assuming wolverines currently use north side of Eagle Peak and West Peak.

- The anticipated increase in cross-country skiing should have minor impact relative to downhill development.

-- ASSUMPTION: Use in the Gold Lake vicinity should not be appreciably affected, due to distance and favorable topographic break. Wolverines currently use Waldo Road in winter despite snowmobile activity. This disturbance is intermittent, however, as opposed to the more continuous skiing activity.

- Summer effects should be short-term and associated with logging and lift construction.
- Rerouting the Pacific Crest National Scenic Trail will reduce human activity in Douglas Horse Pasture area and have a positive effect.
- Expansion involving only the south side of Eagle Peak would have little effect on wolverine habitat.

Question Four: Is what we do not know about wolverines essential to a reasoned choice among the alternatives proposed for expansion?

- Group consensus was that a rational decision could probably be made based on current knowledge. This was based primarily on the relatively small percentage of habitat affected (3 square miles out of 60 square miles of winter range, or 5%) and to a lesser degree, the propensity of

wolverine to utilize the area under present levels of human disturbance (i.e., existing cross-country skiing and snowmaking activity).

Question Five: If further information were essential, how much would it cost in terms of time and people?

Even though further information was not considered essential to a rational decision, the group elected to consider this question also.

- Utzinger's proposed study will take two years to complete, and the principal researcher indicates that it will provide few absolutes that would aid in the choice between alternatives. The research will cost roughly \$10,000 for the two year study.
- The effort to develop the information needed to effectively balance management of wolverines and winter sports in the Willamette Pass area could generate two to four Master and Doctorate degrees. The time frame could encompass six years and costs range from \$40,000 to \$60,000. This program should develop reliable information to answer the unknown factors listed above.
- Taking the research information into account, the State of Oregon's Department of Fish and Wildlife could develop an effective management direction for the threatened species in two to six months.

RISK ANALYSIS

The information gathered by the team to this point was utilized in an evaluation of the key question:

What is the probability and severity of loss of habitat utilization by wolverines in the following areas (due to the expansion of Willamette Pass Ski Area)?

H = High M = Moderate L-Low

	<u>PROBABILITY</u>	<u>SEVERITY</u>
Study Area 1100 Acres	H	M
Douglas Horse Pasture - Gold Lake Bog and Lake	L-M	L
Local Wolverine territory 60 sq. miles (winter)	L-M	L-M
Central Cascades	L	L
Oregon	L	L

APPENDIX D

PUBLIC DEMAND FOR SKIING AT WILLAMETTE PASS

The following analysis is based on a recent study entitled An Analysis of the Current Potential Demand for Overnight Accommodations in the Willamette Pass Recreation Area, 1981 by the University of Oregon, Department

of Urban Planning and discussions with Urban Planning Prof. Dave Povey.

In this study, demand is defined as an individual's desire to participate in a certain activity and is measurable. Note that "measured" demand is sometimes different than actual demand because it is based on the desire to participate rather than actual participation.

The demand for skiing in the primary market area is calculated according to the following equation:

$$\begin{array}{ccccccc} \text{Participation} & & \text{Population} & & \text{Site} & & \text{Recreation} \\ \text{Rate} & \times & \text{Projection} & \times & \text{Attraction} & = & \text{Demand} \\ \text{Per Capita} & & \text{for Year N} & & \text{Multiplier} & & \text{for Year N} \\ & & & & & & \text{(at particular site)} \end{array}$$

The variables are defined as follows:

- 1) Participation rate per capita is figured by multiplying the percent of the population times the participation rate.
- 2) Percent population participating = the percent of the total population that participates in a given activity.
- 3) Participation rate = the average number of times per year the population participates in the activity.

- 4) Population projection for year n = the projected population of the primary market area for the year in question.
- 5) Total market participation = the population for year n times the participation rate per capita.
- 6) Site attraction multiplier = the relative share, or percent, of the total participation that takes place at a particular site.

The calculated demand projections are based on several assumptions:

- 1) The "rate per capita" will stay at the present level. A figure of 7.53% is used in the calculations.
- 2) The participation rate is 11.53 times per year. This figure is based on actual skier use in the northwest.
- 3) The number of skier visits is proportional to the population. The population projections used in the following calculations are taken from by the Center for Population Research and Census, Portland State University. The population projections take into account recent population declines due to recession and are conservative. The population projections also assume that Oregon will not experience another decline in population over the next 15 years.
- 4) The site attraction multipliers are based on the preference of Lane County skiers to use either Hoodoo, Bachelor or Willamette Pass during the 1983-84 season - the first season to reflect the level of development described under the No Change-Phase I Only Alternative.

The projections make implicit assumptions or estimates about the major variables that affect the participation rate for downhill skiing. Each assumption and a discussion of its importance is included below:

Assumption: Snow conditions will be fair to good

Discussion: Historic records suggest

that at 5000 ft. elevation, snow conditions at the base area of Willamette Pass will be marginal one out of every 3 to 5 years. The Thanksgiving and Christmas holiday seasons are particularly important times for ski resorts. Skiable snow during this period usually results in a profitable season. Based on experience with ski resorts in Oregon and Washington, poor snow results in a decrease in skier visits at low elevation resorts such as Hoodoo and Willamette Pass; skier visits at high elevation resorts such as Bachelor generally remain constant.

Assumption: Hoodoo and Bachelor Ski Areas will not expand facilities.

Discussion: Adding new chairlifts and runs at Hoodoo, Bachelor, and Willamette Pass Ski Areas will attract skiers initially, although the excitement of new facilities may decrease over time. Market studies suggest that customer services such as groomed slopes, nice base lodge, friendly lift attendants, short lift lines, as well as price, snow conditions, etc. may be more important in keeping ski areas viable.

Assumption: Economic conditions in Oregon will gradually improve.

Discussion: Skiers generally come from families with discretionary income or those in the mid to upper income brackets. During national recessions, destination ski resorts experience a decrease in skier visits whereas skier visits at day use areas remain relatively constant. It is reasonable to assume that if extensive local or regional layoffs affected families in the middle (\$15,000 to \$25,000 per year) income brackets, skier visits at Hoodoo and Willamette Pass Ski Areas would decrease.

Other factors which could affect skiing activity at Willamette Pass Ski Area to a lesser extent include:

- New skiers coming from outlying areas (Roseburg, Klamath Falls, Coos Bay, Corvallis, Albany).
- Inactive skiers returning to the sport.
- Potential skiers inspired by friends or package deals.
- Current skiers dropping out.
- Increases in transportation costs.
- Increase in traffic and highway accidents on Highway 58.
- Poor road conditions (snow and ice) on Highway 58.

On a national as well as local level, ski sales and participation at ski swaps and shows indicate that interest in skiing is increasing (Povey, personal communication). Skiers dropping out

of the sport are being replaced by inactive and/or new skiers; skier visits at Bachelor, Hoodoo, and Willamette Pass Ski Areas are up substantially in 1984-85 over previous years (see Table IV-15). Increased transportation costs could cause an overall reduction in skier visits in the Central Cascades; however, the proportion of skiers traveling to day use areas (Hoodoo and Willamette Pass) would probably increase. Poor road conditions, and to a less extent, heavy traffic, also tend to discourage skiing activity.

METHOD I

In the first method the projected skier demands for Lane County and specifically for Willamette Pass Ski Area are calculated using site attraction multipliers provided by the Department of Urban Planning, University of Oregon (Table VIII-1). The study used a "low" (0.32) and "high" (0.53) site attraction multiplier for skiers coming to the Willamette Pass Ski Area based on two surveys taken in Eugene (low) and at the ski area (high).

Table VIII-1

PROJECTED ALPINE SKIER DEMAND FOR WILLAMETTE PASS SKI AREA IN LANE COUNTY

	!	1985	!	1990	!	1995	!	2000
Population, Lane County	!	271000	!	292000	!	312900	!	334200
Percent Participation <u>1/</u>	!	7.53	!	7.53	!	7.53	!	7.53
Skiers in Lane County	!	20,406	!	21,990	!	23,560	!	25,165
Participation Rate <u>1/</u>	!	11.53	!	11.53	!	11.53	!	11.53
Estimated Skier Visits in Lane County	!	235,285	!	253,517	!	271,663	!	290,155
Estimated Skier Visits at Willamette Pass	!		!		!		!	
Method I - Survey Data <u>2/</u>	!		!		!		!	
Low <u>3/</u>	!	75,290	!	81,125	!	86,930	!	92,850
High <u>4/</u>	!	124,700	!	134,364	!	143,980	!	153,780
Method II - Actual Skier Preference (February, 1984 and 1985) <u>5/</u>	!		!		!		!	
	!	152,935	!	164,785	!	176,580	!	188,600

1/ Taken from Oregon Department of Transportation, State Comprehensive Outdoor Recreation Plan, 1975. Data is for State of Oregon.

2/ Data from University of Oregon, Department of Urban Planning An Analysis of the Current Potential Demand for Overnight Accommodations in the Willamette Pass Recreation Area, 1984 .

3/ Site attraction indicator = 0.32

4/ Site attraction indicator = 0.53

5/ Site attraction indicator = 0.65

Example: Method I Low

$$\text{Skier Visits} = (271,000) \times (0.0753) \times (11.53) \times (0.32) = 75,290$$

METHOD II

The second method ^{1/} uses a site attraction multiplier based on actual skier use at Bachelor, Hoodoo, and Willamette Pass Ski Areas during February 1984 and 1985. The two months were selected for comparison for the following reasons:

- The month of February, characterized by a good snow pack and holiday crowds (President's Day), is a peak month for alpine skiing in the Northwest.
- The number of skier visits at the three areas during February 1984 and 1985 is a reflection of skier preference. A comparison of the total skier visits would be biased due to Bachelor's extended ski season (Nov. to Aug.).
- The 1983-84 and 1984-85 winter seasons represent good snow years. As of March 1, 1985, use increased between 20 and 60 percent at Bachelor, Hoodoo, and Willamette Pass compared with the same period during the 1983-84 season (see Table IV-15).

The level of facility development remained constant at the three ski areas; no new lifts or runs were added at Bachelor, Hoodoo, or Willamette Pass during this time period. The major changes in facilities and management at each ski area are described below:

- Bachelor:

1. Raised lift prices from \$16.50 to \$18.00.
2. Actively promoted and marketed the area outside of Oregon.

- Hoodoo:

^{1/} The Method II projections displayed in the DEIS have been recalculated. The assumptions used in the original calculations (such as a sustained 20% increase in skier visits due to addition of new lift) would not be substantiated. Although the number of skier visits would probably increase as new lifts are added, the percent increase would more likely change over time.

1. Lowered lift prices from \$14.00 to \$10.50
2. Added new ramps to chairlifts.

- Willamette Pass

1. Opened new base lodge.
2. Raised lift prices from \$12.00 to \$13.00

The site attraction calculations are shown in Table VIII-2. The number of paid skier visits in February 1984 and 1985 as well as the percent of skier visits from Lane County were provided by Hoodoo Ski Bowl, Inc., Mt. Bachelor Inc. and Willamette Pass Ski Corporation based on their recent market information. The relative proportion or percent of Lane County skier visits was determined for each ski area. This figure represents the site attraction multiplier. Note that Willamette Pass Ski Area received an average of 65% of the skier visits in Lane County during the last two seasons.

The projected skier demand calculated for Willamette Pass Ski Area using the average site attraction multiplier are shown in Table VIII-1 (Method II). The projections represent an upper limit. During poor snow years, the total number of skier visits in the Central Cascades generally remains constant; however, the relative proportion of Lane County skier visits at Bachelor will increase at the expense of Willamette Pass, and to a lesser extent, Hoodoo. The actual proportion of Lane County skier visits at Willamette Pass may also decrease as the excitement of the new day lodge wears off. However, if new chairlifts and runs are constructed, the relative share of skier visits would increase.

(Based on actual paid skier visits in February 1984 and 1985)

	BACHELOR	HOODOO		WILLAMETTE PASS		TOTAL		
	February 1984	February 1985	February 1984	February 1985	February 1984	February 1985		
paid skier visits	50,487	60,687	7,690	9,826	10,697	16,854	68,874	87,367
% of paid skier visits from Lane County		8% <u>2/</u>	15% <u>3/</u>	80% <u>4/</u>				
Paid skier visits from Lane County	4,039	4,855	1,154	1,474	8,558	13,483	13,751	19,812
Site attraction multiplier <u>5/</u>	.29	.25	.08	.07	.62	.68		
Average site attraction multiplier	.27		.075			.65		

1/ Does not include season pass holder visits.

2/ Based on market information provided by Mt. Bachelor, Inc. for Willamette Valley and modified to include Lane County, March 1985.

3/ Hoodoo Ski Bowl, Inc., March 1985.

4/ Willamette Pass Ski Corporation, November 1984.

5/ Proportion of total paid skler visits in Lane County

The demand projections in Table VIII-1 provide a guideline to assess the public need or desire for more downhill skiing facilities in the Central Cascades. They also assist the permittee in evaluating the economic viability of the proposed development. The projections do not predict future use. The figures indicate the number of people who desire to participate in alpine skiing or the potential number of skier visits at Willamette Pass from Lane County through the year 2000.

APPENDIX E

Assumptions Used in Break-Even Analysis

The following assumptions were used in preparing the break-even analysis for the Willamette Pass Ski Area:

I. Budgeted Costs:

A. Labor

- Ski Shop/Rental Shop
- Cashiers
- Lift Operations
- Overhead Salaries

B. Material and Supplies

- Snow Grooming
- Lift Maintenance
- Generator Set
- Fuel/Utilities
- Janitorial/Cleaning
- Miscellaneous Supplies

C. Overhead

- Employee Benefits
- Professional Fees
- Receptionist
- Office Supplies, Phone, Travel, etc.
- Insurance
- Taxes

D. Financing

- Existing Loans
- Expansion Financing

II. Variable Costs

- Forest Service Fee
- Cost of Labor and Supplies: Ski School, Restaurant
- Advertising
- Liability Insurance

III. Capital Outlays

A. Completion of Phase I

- Lift C
- Upper Parking Lot
- Pedestrian Overpass
- Relocate Old Lodge
- Night Skiing Improvements

B. Phase II

- Cross Country Ski Trail
- Construction of New Lifts (D,E,F,G,H)
- Replacement of A With a Triple Chair
- Additional Parking
- Construction of Summit Lodge, Septic and Water System
- Drill New Wells
- Relocation Pacific Crest Trail
- Purchase of Snow Groomers

IV. Revenue

1983-84 revenue/ski visit:
\$15/skier visit

Anticipated future revenue/ski visit: \$16.60/skier visit

VI. Contribution Margin (Amount of revenue going to lift, ski school, food, operations, etc.)

Contribution Margin = $10.045 \times$
(No. of paid skier visits)

Derivation of break-even point:

Fixed Capital = (Contribution margin) \times (Number of skier visits)

or

Number of skier visits = Fixed Capital/Contribution Margin

Economic break-even: The volume of skier visits per season required to meet all operating and cash expenses, including the cost of

capital. To calculate the break-even point the following assumptions were made:

- 1) The ski season will last 120 days.
- 2) The average cost of installing a lift is the same for D, E, F, G, H and upgrading A to a triple chair.
- 3) The break-even model is set up take place over three years. In reality the improvements will probably be put in place as a function of actual skier visits in preceding years, perceived market timing and the permittee's ability to finance the expansion. All of the above are very important to consider in order to understand the projections. If any one improvement is not made for a period of time the corresponding year could be considerably less. Likewise, if need be the permittee's internal carrying cost can be deferred due to the fact they borrow from themselves; this also lowers their break-even. (See comment number 3, Willamette Pass Ski Corporation, letter).
- 4) The actual figures used in the calculations are available for review at the Oakridge Ranger District.
- 5) Assumptions built into the individual alternatives are as follows:

Alternative I - The fixed costs of the base lodge

are reduced to reflect the smaller sized structure approved in the decision on Willamette Pass Phase I developments. This reduction results in 2500 fewer skier visits needed to break even. The Willamette Pass Ski Corporation decided to risk building a new 40,000 square foot lodge rather than expand the old lodge.

Alternative II and III - Assume a 10% increase in labor costs to accommodate expansion.

Alternative IV - Assume a 20% increase in labor costs. Alternative IVC (no access roads or Summit Lodge) includes an 15% increase in installation and maintenance costs for lifts D,E and G.

Alternative V - Assumes a 20% increase in labor costs. Employee housing and overnight accommodation costs are not included in the calculations.

Alternative VI - Assumes a 30% increase in labor costs. Employee housing and overnight accommodation costs are not included in the calculations. Skier visits required to break-even can be seen in table VIII-3.

TABLE VIII-3

ALTERNATIVE	SKIER VISITS NEEDED TO BREAK-EVEN
I	78,050
II	93,226
IIB	100,650
III	93,885
IV, IVB and IVD	116,110
IVC	114,000
V	120,093
VI	145,240

APENDIX F

WILLAMETTE PASS AREA: SENSITIVE PLANTS NARRATIVE

A general preliminary reconnaissance was done August 9, 1984 by a USFS biological technician. The survey was a general scoping of the area, to determine presence of habitats likely to support sensitive plant species, and to check representative habitats encountered enroute for occurrence of sensitive plant species. The survey was not an intensive inventory effort, and was not intended to substitute for a thorough inspection of potential sensitive species habitats. No listed sensitive plants were encountered in the areas traversed; however, the potential for occurrence of sensitive species on other portions of the study area is acknowledged and addressed in the FEIS; Environmental Consequences, Sensitive Plants, Mitigations. An on-the-ground inventory will be conducted during the flowering season (approximately June through September) to locate and identify populations of any sensitive plants which may occur in the area. If sensitive plant populations are located during the inventory, then sighting reports will be submitted to the district planning department, the Willamette National Forest Office and the Natural Heritage Data Base for proper documentation, and adjustments in design of ski area facilities will be made as necessary in order to protect sensitive plant populations. The facilities proposed in the FEIS are conceptual in design. If summer inventories locate sensitive plant populations, potential impacts to sensitive plants can be largely avoided by working with the permittee to design ski facilities around the sensitive sites.

The inventory will emphasize proposed trails, roads, lift and run clearings, any associated clearings and special

habitat areas. Special habitats identified included rock outcrops, talus and scree slopes, riparian areas, meadows, bogs, and dry or ephemeral lake beds.

The peaks and upper slopes of Eagle Butte have shallow pumice and ash soils and abundant rock outcrops. This soil type has potential to support a variety of plant communities typically associated with rocky high elevation sites (see Table VIII-4, Site Indicator Species, and Table VIII-5, Sensitive Plants Associates).

Proposed Lift D crosses an area identified as rock outcrop; Lift E approaches headwaters of a class IV stream, which drains into a system of meadows, bogs, ponds, and a lake; Lifts D and F include portions of areas identified as having avalanche hazard potential, which indicates possible avalanche maintained plant communities; Pacific Crest Trail relocation is in the vicinity of dry or ephemeral lake beds. These are all habitats with moderate potential for inclusion of sensitive species in their plant communities. Thus proper inventory of proposed development areas prior to ground or canopy disturbance is recommended to ensure conservation of sensitive plant species.

The area of consideration in the Willamette Pass Ski Area expansion lies within the geologic-physiographic High Cascades province of western Oregon. For detailed information consult USDA-USFS General Technical Report PNW-8. The Willamette Pass is in the subalpine forest type, which includes Abies amabilis, Abies lasiocarpa, Tsuga mertensiana, and in southern Oregon, Abies magnifica shastensis vegetational zones. The crest of the Cascades is also in proximity to Abies grandis and Pseudotsuga emnsiesii zones of the mixed coniferous forest region, and patches of timberline and alpine

regions. The Plant Association and Management Guide for the Pacific Silver Fir Zone: Mt. Hood and Willamette National Forests, USFS, 1982, indicates that Abies amabilis and Tsuga mertensiana associations predominate the Willamette Pass area (for more information on plant associations in this area, the analysis file for Willamette Pass Alpine Winter Sports Site is available for review at Oakridge Ranger District).

Potential impacts to sensitive plant populations could result from alterations in soil and water chemistry, soil stability, moisture regime, soil disturbance or compaction. Potential impacts and mitigation measures are addressed in the FEIS; Environmental Consequences section. Other features which could affect plant populations include sewage disposal at Summit Lodge, competition from non-native seeded species for soil erosion control on lift runs and roads, fertilization of such seedings, canopy removal and resultant changes in snow-holding capacity and insulation, and accessibility and vulnerability to trampling and collection. On-site impacts can be avoided by designing ski area facilities around sensitive sites if necessary. Intensive inventories will be conducted during the design phase, at appropriate times of the year to locate, identify, and document any populations of sensitive plants. Flexibility in design of development facilities will be utilized to avoid potential impacts to sensitive plant populations.

Any action which results in removal of vegetation in the water, lowering of water table, long-term changes in water temperature or degradation of water quality could affect plants, fish, and amphibians known to occur in Gold Lake Bog, and potentially occurring elsewhere along Skyline Creek. Several uncommon species of bog plants occur

in Gold Lake Bog: Drosera angelica, Drosera longifolia, Drosera rotundifolia, Utricularia intermedia, Utricularia minor, Utricularia vulgaris, (all carnivorous) and '83 Review species Scheuchzeria palustris. Two species of frogs which are of scientific interest occur in the bog: Rana cascadae and Rana pretiosa, the latter considered to be rare in Oregon, with isolated populations occurring at a few high Cascade lakes. Reductions in populations at known sites of Rana pretiosa elsewhere in the high Cascades have been noted, particularly in the more accessible areas. Similar reductions in populations of Rana cascadae have also been noted and a few known populations have become extirpated (personal communication with the Zoology Department at O.S.U.). There is some potential that another species of amphibian, Ascaphus truei may occur in tributaries to Gold Lake; however, this species has not been documented to occur there. Expansion of the Willamette Pass Development is not expected to alter summer recreational access to this already highly accessible area. Though improved facilities may attract additional users to the area, the relocation of the PCNST should divert some of the summer traffic away from Douglas Horse Pasture, Skyline Creek, and Gold Lake Bog. Off-site impacts and mitigation measures are addressed in the FEIS; Environmental Consequences, under the section on water.

WILLAMETTE PASS AREA: ZONAL VEGETATIVE COMPOSITION NARRATIVE

Within the Abies amabilis zone, 1000-1500 m elevation, tree species are Abies amabilis*, Tsuga heterophylla*, Abies procera, Pseudotsuga menziesii, Thuja plicata and Pinus monticola, with lesser amounts of Abies grandis, Picea engelmannii, Pinus contorta, and east of the crest Larix occidentalis. At high elevations Tsuga mertensiana

and Chamaecyparis nootkatensis are also components. Dominant understory species include Vaccinium ovalifolium, V. alaskense, Menziesia ferruginea, Galutheria shallon, Rhododendron macrophyllum, Chimaphila umbellata, and Pyrola* spp. Other species typical of this zone are Cornus canadensis, Clintonia uniflora*, Viola sempervirens, Rhytidiopsis robusta; on dry sites, Berberis nervosa*; on moist sites, Tiarella unifloiata, Streptopus roseus, Achyls triphylla, Gymnocarpd dryopteris, Vancouveria hexandra, Smilacine stellata*, Oxalis oregana, and Blechnum spicant; and on wet sites, Athyrium filix-femina* and Oplopanax horridum*.

Special types in the Abies amabilis zone are Alnus sinuata* communities, which are maintained by repeated avalanching, heavy snow accumulations, and/or high water tables.

Tsuga mertensiana zone, 1500-2000m, along crest of Cascades and westward, is dominated by Tsuga mertensiana, Abies lasiocarpa, and Pinus contorta. Associated tree species are Abies amabilis*, Chamaecyparis nootkatensis, Picea engelmannii, Pinus albicaulis*, Pseudotsuga menziesii, Pinus monticola, Tsuga heterophylla*, Abies procera, and in the southern Oregon Cascades Abies magnifica shastensis. Understory species typical of this zone are Vaccinium membranaceum, Pyrola secunda*, Rubus lasiococcus*, Xerophyllum tenax*; at high elevations, Vaccinium ovalifolium, Sorbus spp., Oplopanax horridum*, Athyrium filix-femina*, Menziesia ferruginea, Rubus pedatus, Valeriana sitchensis, Viola sempervirens, Listera caurina, Cladothamnus pyrolaeiflorus, listicum americanum and Coptis asplenifolia; north of our area, rhododendron albiflorum; and along the crest of the Cascades in central and southern Oregon, Vaccinium scoparian, Chimaphila umbellata and Arctostaphylos nevadensis.

Special types within the Tsuga mertensiana zone are wet mountain meadows, bogs and moors which include species such as Vaccinium occidentale*, Dodecathon jefferyi*, Epilobium glandulosum*, Carex spp.*, Juncus spp.*, Alnus sinuata*, Salix spp.*, Drosera spp.*, and Utricularia spp.*. Refer to Gold Lake Bog Research Natural Area in Franklin et al. 1972.

In the Abies lasiocarpa zone, 1500 m to subalpine-alpine ecotone, along the crest of the Cascades and eastward, and at lower elevations in areas, drainage and accumulation of cold air, major tree species are Abies grandis, Pseudotsuga menziesii, Pinus monticola and Larix occidentalis; and at higher elevations, Pinus albicaulis* and Larix lyallii. Minor stand components may include Pinus ponderosa, Populus tremuloides, Abies amabilis*, A. procera and Tsuga mertensiana. At lower elevations understory components are Pachistima myrsinites*, Clintonia uniflora*, Galium triflorum, Acer glabrum, Arnica cordifolia, Hieracium albiflorum*, Amelancier alnifolia, Aster conspicuus, Mitella stauropetala, Actaea rubra, Coptis occidentalis, Viola glabella, Adenocaulon bicolor, Rubus parviflorus, Arenaria macrohylla and Spiraea betulifolia. On upper south slopes and ridgetops Xerophyllum tenax*, and Vaccinium membranaceum are major understory species, while wet ravines and cool north slopes may be occupied by Menziesia ferruginea and Ledum glandulosum communities. On dry sites Vaccinium scoparium, V. caespitosum, Carex spp.*, Aster spp.*, Juniperus communis, Calamagrostis rubescens, and Phyllodoce empetriformis may be present.

Special types within the Abies lasiocarpa zone are grassy balds dominated by grasses and forbs such as Agropyron, Festuca*, Phlox*, Achillea*, Stipa, Madia, Deschampsia, carex, Polygonum*, Aster*, Senecio*

Lithophyragma, Collinsia, Cryptantha,
Lupinus*, and Phacelia.

V. occidentale*
V. ovalifolium
V. scoparium

* - Indicates species which have been found to occur in association with sensitive plant species. Note that this is not a complete listing of all possible associations, but is a compilation from available data.

Information on sensitive species which may be found in association with species*, is available in the analysis file for Willamette Pass Alpine Winter Sports Site at Oakridge Ranger District.

Below is a list of Plant species for Gold Lake Bog and surrounding area, potential species list for other Skyline Creek meadows.

Trees

Abies amabilis
A. lasiocarpa
A. magnifica var. shastensis
Betula glandulosa
Picea engelmenii
Pinus contorta
P. monticola
Pseudotsuga mensiesii
Tsuga mertensiana

Shrubs

Betula glandulosa
Kalmia microphylla
K. polifolia
Lonicera caerulea
Rubus lasiococcus*
Salix geyeriana*
Spiraea douglasii
Vaccinium membranaceum

Herbs

Aconitum columbianum
Aster occidentalis
Caltha biflora
Chimaphila umbellata
Clintonia uniflora
Dodecatheon jeffreyi
Drosea anglica
D. longifolia* (carnivorous)
D. rotundifolia* (carnivorous)
Epilobium alpinum
Galium trifidum
Hypericum anagalloides
H. formosum
Lingusticum grayii
Menyanthes trifoliata
Mimulus guttatus
M. primuloides
Muhlenbergia filiformis
Pedicularis groenlandica
Polygonum bistordoides
Potamogeton natans
Pyrola asarifolia
P. secunda
Ranunculus gormanii
R. aquatilis
Saxifraga oregana
Scheuchzeria palustris (183 or review)
Senecio triangularis*
Sphenosciadium capitellatum
Tiarella unifoliata
Tofieldia glutinosa
Utricularia intermedia*
(carnivorous)
U. minor*
U. vulgaris* (carnivorous)
Viola adunca
V. sempervirens
Xerophyllum tenax*

TABLE VIII-4
WILLAMETTE PASS AREA - SITE INDICATOR SPECIES

HOT DRY

HODI	Holodiscus discolor
CADE M	Calocedrus decurrens
CADE R	Calocedrus decurrens
LOHI	Lonicera hispidula
RHDI	Rhus diversiloba
PHLE 2	Philadelphus lewisii
BEAQ	Berberis aquifolium
PSPH	Psoralea physodes
PIPO	Pinus ponderosa
PILA	Pinus lambertiana
PSME R	Pseudotsuga Menziesii
NEPA	Nemophila parviflora
ARME	Arbutus menziesii
QUGA	Quercus garryana
COCO	Corylus cornuta
WHMO	Whipplea modesta

WARM DRY

BENE	Berberis nervosa
CACH	Castanopsis chrysophylla
RHMA	Rhododendron macrophylla
XETE	Xerophyllum tenax
PAMY	Pachistima myrsintes
GASH	Gaultheria shallon
ABGR R	Abies grandis
WHMO	Whipplea modesta

COLD DRY

*VASC	Vaccinium scoparium	
TSME	Tsuga mertensiana	(mature and regen.)
PYSE	Pyrola secunda	
PICO	Pinus contorta	(most often)

COOL DRY

ARNE	Arcostaphylos nevadensis -	(especially the warmer,
ARCO	Arctostaphylos columbiana -	dry areas)
XETE	Xerophyllum tenax	
VAME	Vaccinium membranaceum	
RHMA	Rhododendron macrophyllum	
CHUM	Chimaphila umbellata	
PYSE	Pyrola secunda	
ABPR	Abies procera	
ABAM	Abies amabilis	(mature and regen.)

WET (SATURATED) COLD

*RHAL	Rhododendron albiflorum
MEFE	Menziesia ferruginea
*ERMO	Erythronium montanum
*CHNO	Chamaecyparis nootkatensis
OPHO	Oplopanax horidum
VASI	Valeriana sitchensis (moist meadow)

WET (SATURATED) WARM

*OPHO	Oplopanax horidum
OXOR	Oxalis oregana
*ATFI	Athyrium filix-femina
*DRAU 2	Dryopteris austriaca
DIFO	Dicentra formosa
*MIBR	Mitella breweri (cool also)
MOSI	Montia sibirica

MOIST COOL

TIUN	Tiarella unifoliata
CLUN	Clintonia uniflora
AETR	Achlys tryphylla
ABPR	Abies procera
ABAM	Abies amabilis (mature and regen)
ASCA 3	Asarum caudatum
PIEN	Picea engelmannii
STRO	Streptopus rosius
*SMST	Smilacina stellata
RULA	Rubus lasiococcus
VAHE	Vancouveria hexandra

MOIST WARM

OXOR	Oxalis oregana
POMU	Polystichum munitum (under dense cover)

- * One of these speices' presence indicates the environmental condition i.e., Hot - Dry, Cool - Dry, etc. For other species, two or more from a group (not both trees) must be present.

Table VIII-5: Sensitive Plants Associates

Willamette Pass Area Sensitive Plants Associated Species based on zonal vegetational descriptions and species list for Gold Lake Bog.

Abies amabilis	Polystichum andersonii
Achillea spp	Aster gormanii
	Collomia debilis
	Erigeron cascadiensis
	Frasera umpquaensis
	Haplopappus hallii
	Romanzoffia thompsonii
Alnus sinuata	Polystichum andersonii
Aster spp	Frasera umpquaensis
	Sidalcea cusickii
Athyrium filix-femina	Sidalcea cusickii
Berberis nervosa	Hemitomes congestum
Carex spp	Frasera umpquaensis
	Ophioglossum vulgatum
	Lilium washingtonianum
	Sidalcea cusickii
Clintonia uniflora	Polystichum andersonii
Dodecathon jefferyi	Carex interrupta
Drosera spp	Lycopodium inundatum
Epilobium glandulosum	Sidalcea cusickii
Festuca spp	Haplopappus hallii
	Lilium washingtonianum
Hieracium albiflorum	orobanche pinorum
Juncus spp	Aster gormanii
	Ophioglossum vulgatum
	Sidalcea cusickii
Lupinus spp	Haplopappus hallii
Mimulus guttatus	Romanzoffia thompsonii
Oplopanax horridum	Polystichum andersonii
Pachistima myrsinites	Haplopappus hallii
Phlox spp	Haplopappus hallii
Pinus albicaulis	Collomia debilis
Polygonum spp	Gentiana newberryi
Pyrola spp	Hemitomes congestum
	Pleuricospora fimbriolata
Rubus lasiococcus	Polystichum andersoni
Salix spp	Sidalcea cusickii
Scheucheria palustris	'83 OR Review
Senecio triangularis	Carex interrupta
	Frasera umpquaensis
	Sidalcea cusickii
Smilacina stellata	Polystichum andersoni
Tsuga heterophylla	Haplopappus hallii
	Pityopus californica
Utricularia spp	Utricularia spp
Vaccinium occidnetale	Lucopodium inundatum
Xerophyllum tenax	Aster gormanii
	Erigeron cascadiensis
	Lilium washingtonianu

COMPILATION OF POTENTIAL PLANT LISTS; Willamette Pass and Adjacent Areas

<u>Sensitive Species</u>	<u>Classification Status in Oregon</u>	<u>Occurrence</u>	
		<u>WNF</u>	<u>DESC</u>
Agoseris elata	'84 R-6(OR, WART&E)	S	D
Allium campanulatum	'84 R-6(ORRT&E)	D	D
Arabis suffrutesceus	'84 R-6(FED2,ORRT&E)	?	?
Arnica viscosa	'84 R-6(FED2,ORRT&E)	S	D
Asplenium sepentrionale	'84 R-6(ORRT&E)	S	?
Aster gormanii	'84 R-6(FED2,ORRT&E)	D	S
Astragalus peckii	'84 R-6(FED2,ORRT&E)	?	D
Botrychium lunaria	'84 R-6(OR, WART&E)	S	?
Botrychium pumicola	'84 R-6(FED2,ORRT&E)	S	D
Botrychium simplex	'84 R-6(ORRT&E)	S	?
Carex interrupta	'84 R-6(FED3C, WART&E)	S	?
Carex seabrinscula	'84 R-6(ORRT&E)	?	?
Collomia debilis	'84 Monitor	D	?
Collomia mazama	'84 R-6(FED2,ORRT&E)	?	?
Draba aureola	'84 R-6(ORRT&E)	D	D
Eburophyton austinae	'84 OR Monitor	D	?
Elmera racemosa	'84 OR Monitor	D	?
Erigeron cascadiensis	'84 OR Monitor	D	?
Frasera umpquaensis	'84 R-6(FED2,ORRT&E)	D	?
Fritillaria camchatcensis	'84 R-6(OR, WART&E)	?	?
Gentiana newberryi	'84 R-6(ORRT&E)	D	D
Haplopappus hallii	'84 FED CT, '81 Delete	D	?
Hemitomes congestum	'84 OR ReviewART&E)	D	?
Hieracium bolanderi	'84 R-6(ORRT&E)	?	S
Kalmiopsis leachiana	'84 OR Monitor	S	?
Lathyrus holochlorus	'84 OR Monitor	?	D
Lilium washingtonianum	'84 OR Monitor	D	?
Lycopodium annotinum	'84 R-6(ORRT&E)	D	S
Lycopodium inundatum	'84 R-6(OR, WART&E)	D	?
Mimulus heppsonii	'84 R-6(ORRT&E)	?	D
Ophioglossum vulgatum	'84 R-6(OR, WART&E)	D	S
Orobancha pinorum	'84 OR Monitor	D	?
Pellaea andromodaefolia	'84 R-6(ORRT&E)	S	?
Pellaea brachyptera	'84 OR Monitor	D	?
Perideridia howellii	'84 R-6(ORRT&E)	?	?
Phacelia verna	'84 R-6(FED2,ORRT&E)	S	?
Pityopus californica	'84 OR Monitor	S	?
Pleuricospora fimbriolata	'84 OR Review	D	?
Polystichum andersonii	'84 ORIII, '83 Delete	D	?
Romanzoffia trhompsionii	'84 OR Monitor	D	?
Sidalcea cusickii	'84 R-6(FED2,ORRT&E)	D	?
Sidalcea setosa	'84 R-6(ORRT&E)	D	?
Silene hookeri	'84 R-6(ORRT&E)	?	?
Smelowskia calycina	'84 R-6(ORRT&E)	?	?
Utricularia intermedia	'84 OR Monitor	D	?

'84 R-6: USFS Region 6 Sensitive Plant List

FED2: Further info. needed to confirm appropriateness of listing FED T&E

ORRT&E: R,T&E Plants and Animals of Oregon, '83, ONHDB, Nature Conservancy

WART&E: " Washington, '84, WNHP, Dept. Natural Resources

S: Suspected to occur

D: Documented to occur

FED3C: Deleted, more abundant than previously thought or not subject to threat.

APPENDIX G

EROSION CONTROL

As part of the Special Use Permit, the permittee is required to provide the Forest Service with an erosion control plan. The permittee is responsible for complying with all requirements set forth in the special use permit section on revegetation and erosion control. The Forest Service is responsible for seasonal compliance monitoring. Successful revegetation is defined as: within 2 years after soil-disturbing activities on bare soil areas, there will be a minimum of 60 percent effective ground cover over a minimum of 80 percent of the areas with soil disturbance. Effective ground cover is defined as all living or dead herbaceous or woody materials and rock fragments greater than three-fourths of an inch in diameter in contact with the ground surface. Both the 60 and 80 percent are Forest Service standards. The 60 percent is a Forest Service standard for minimum percent effective ground cover following soil-disturbing activities on soils with a high erosion hazard class. The 100 percent recovery of effective ground cover is unrealistic and has been deleted from the report. The effects of short-term erosion on potential revegetation are expected to be very minimal. The following explanation describes concerns for areas with high and/or very high erosion hazards and where other short term erosion will most likely occur and how it will be mitigated.

As observed on the south side development where the duff layer has been left in place, there is no evidence of surface soil erosion. On steep, bare soil areas (high erosion hazard areas) there will be short-term soil erosion from snow melt and high intensity rainstorms. Evidence from the south side development shows that

short-term erosion occurs on or adjacent to areas where soil is compacted such as permanent roads, temporary roads, skid trails or concentrated trafficking on undesignated road areas. Natural drainage ways where water is allowed to concentrate have the potential for short-term erosion, as there is some evidence of rill erosion on the south side development. Where short-term erosion has occurred soil material has been deposited on or near the adjacent slope. Eroded soil transport is limited by the irregular slopes which generally bench or level out creating an ideal deposition area.

Mitigation as described in the following explanation is the key to successfully dealing with the identified soil erosion. Any timber sale contract will have provisions for minimizing significant soil disturbance, ripping and constructing water bars on skid trails which will minimize surface water runoff. Permanent roads will be water-barred and appropriately rocked near stream crossings to minimize surface runoff. The permittee is responsible for revegetation of bare soil areas on ski runs and roadsides. The Forest Service is responsible for seasonal compliance monitoring which will assure prompt compliance to the permittee erosion control plan especially in areas of high erosion concern. Mulching materials will be recommended for use in areas of high erosion concern. The permittee will be required to use existing roads, unless new roads are requested by the permittee and are granted by the Forest Service.

Exotic grass species have been used in the past and present on existing runs. Listed are the grass seed

mixtures currently being used on a trail basis for erosion control (on bare soils areas):

Seed Mixes	Type of Grass	Lbs. For Mix	Recommended Application Rate
1. Willamette Mix	Bentgrass, Highland	4	
	Clover, White Dutch	1	
	Fescue, Alta Tall	11	
	Orchard, Common	4	
	Rye, Annual	10	30
2.	Rye, Annual	7	
	Fescue, Creeping Red	20	
	Clover, White Dutch	3	30
3.	Rye, Annual	7	
	Wheatgrass, Dwarf Intermediate (Tegmar)	15	
	Clover, White Dutch	3	25
4.	Rye, Perennial	27	
	Clover, White Dutch	3	30

Results of the trial grass seedings will be monitored by the WPSC and Forest Service. The performance of the trial grass seed mixtures will dictate future grass seed selection.

There is no special land status that directs the use of native plant species. The exotic species will be used as a means of immediate erosion control but in a time period of over 3-10 years, native sedges will invade the site and make up a large portion

of the plant species composition for the disturbed areas) observation from existing development at Willamette Pass Ski Area and other soil-disturbing activities adjacent to the Willamette Pass Ski Area). No grass seeding and fertilizing will be done on the undisturbed areas where the natural soil duff layer exists. Native plant species will be encouraged to occupy the undisturbed soil duff layer areas.

APPENDIX H

PUBLIC COMMENTS

I. Scoping

Scoping was initiated in October, 1983 and continued through November, 1984. The scoping process was used to 1) initiate public comment, 2) determine the scope of issues to be addressed and 3) identify the significant issues related to the proposed action (See Purpose and Need section for significant issues and Appendix B for less significant issues).

The following is a list of scoping activities for the Willamette Pass Environmental Impact Statement:

- 10-12-83 Met with 12 key members from dispersed recreation groups in Eugene.
- 10-18-83 Led three members from dispersed recreation groups on field trip to view area.
- 11-9-83 Met with 27 landowners and permittee's in Crescent Lake Junction.
- 6-4-84 Publicly announced plans to conduct environmental analysis. Requested letters and oral comments from public.
- 6-16-84 Led public field trip for 10 participants.
- 6-27-84 Received numerous letters and phone calls in response to our announcement on 6-4-84.

6/84-8/84 Conducted inter-disciplinary team meetings which included public representatives from Eugene Parks and Recreation and Waldo Wilderness Council.

9-13,18, 19-84 Held open house meetings in Eugene, Oakridge and Crescent Lake Junction. Displayed six alternatives gathered additional public input. A total of 123 people participated; 48 people or 38% of the attendants returned response forms asking for additional issues, concerns or projects that should be considered in the planning process.

10-11-84 Issued Notice of Intent to publish environmental impact statement.

11-16-84 Scoping completed.

II. Summary of Unpublished Comments

The Draft Environmental Impact Statement (DEIS) was circulated to other agencies and the public. Sixty calendar days were allowed for comments in response to the DEIS. During the sixty day comment period an outstanding number of letters were submitted. In total, three hundred and thirty-two (332) letters were received. In addition, petitions received in favor of expansion were signed by 1,744 individuals.

Following is a A) summary of unpublished comments received in response to the DEIS, B) summary of petitions received and C) list of individuals who submitted unpublished comments.

A. Summary of unpublished comments

A total of three hundred and thirty-two letters were received from federal/state agencies, local/national organizations, governments, businesspeople and individuals.

Fourteen letters or four percent of the letters received expressed no comment.

Seventy-four letters or twenty-two percent of the letters received were in opposition to any expansion beyond Alternative II. Approximately 40 percent of the people opposed to expansion supported the no action alternative (Alternative I) while the remaining 60 percent favored some south side development (Alternative II).

Various views were expressed against north side expansion. A large portion of these letters raised questions regarding the proposed expansion and are published along with responses in the Response to Comments section in the final EIS. A short summary of ideas from unpublished letters (not requiring responses) follows:

1. Preserve undisturbed areas for future generations
2. North side is a good place to get away from noise and people
3. Environmental impacts on wildlife, vegetation, watershed, and general ecology of the area
4. Visual impacts on Waldo Lake Area

5. Economic viability of expansion

Approximately one percent (4 letters) of the letters received from business people and individuals supported Alternative III or some modification of Alternative III.

Two hundred and thirty or 70 percent of the letters received were in support of the Forest Service preferred Alternative (IV). Of these 230 letters, approximately 142 came from individuals in the community while the remaining 88 letters were from local business people. The majority of letters received came from the Eugene-Springfield area. In addition, a few letters were written by individuals from coastal, southern and central Oregon communities. One letter was received from Washington state (Tacoma).

Many different views were expressed toward expansion. A summary of the main ideas (unpublished letters) from people in support of expansion follows:

1. Like the proximity to Eugene/Springfield area
 - a. Proximity makes skiing more available and affordable for families and individuals
 - b. Availability of facilities for schools, clubs, and church groups
 - c. Easily accessible for day trips

2. Economic benefit to Lane County

- a. Additional business of selling clothing, equipment and services
- b. Additional employment opportunities
- c. Attraction of outside business
- d. Increased tourism
- e. Increased business to roadside merchants in Oakridge
- f. Non-polluting industry

3. Existing long lift lines

- a. Discourages people from using the area
- b. Expansion would decrease waiting time

4. Improved ski opportunities

- a. Better snow conditions on north slope
- b. Longer ski season
- c. More skiable terrain (intermediate)
- d. Family oriented alpine and nordic ski opportunities
- e. Available groomed nordic ski trails which are immediately accessible from the alpine area

5. Low impact on surrounding environment

- a. Wildlife
- b. Visuals
- c. Wilderness

6. Multiple use management of National Forest lands

- a. Greatest good for the greatest number of people
- b. Why allow a few special interest groups to stop expansion
- c. Sufficient wilderness exists
- d. Support planned development

7. Enjoy the expansion that has occurred to this point

Ten letters were received in favor of Alternatives V and VI. The main ideas from people who supported these alternatives were similar to the views expressed previously (from people in support of the preferred alternative).

B. Summary of Petitions

Skiers For Northside of Willamette (S.N.O.W.) is an organized group of local businessmen (including the permittee) in favor of northside expansion. This group circulated petitions supporting "the expansion of the Willamette Pass Ski Area, as outlines in the DEIS, prepared by the Willamette National Forest."

A copy of the petition is included.

Petitions received in favor of expansion were signed by 1,744 people. Following is a sample petition.



ULLR SPORT SHOP

Delta Village

S. N. O. W. SKIERS FOR NORTHSIDE OF WILLAMETTE

I SUPPORT THE EXPANSION OF WILLAMETTE PASS SKI AREA, AS OUTLINED IN THE DRAFT ENVIRONMENTAL IMPACT STATEMENT, PREPARED BY THE WILLAMETTE NATIONAL FOREST.

KEY FEATURES:

- * 3 Additional Triple Chairlifts - Northside
- * Summit Day Use Lodge
- * Additional Ski Runs
- * 2.5 mile winter access Road - Cross Country Ski Trails
- * Nordic Center
- * Additional Parking Lot & RV Overnight Parking Area

N A M E

A D D R E S S

Z I P

1. Kathy Toney	2545 Chusaruit Eugene	97401
2. Ed Rogers	3525 Mill St Eugene	97405
3. Ch. Long	430 12th Eugene	97402
4. T. Herne	P.O. Box 75-11 Eugene	97401
5. K. Hager	1608 Linden Eugene	97401
6. J. Hager	370 Walnut Lane Eugene	OR 97401
7. J. Hager	459 Road Eugene	OR 97401
8. Susanne Heiderer	459 Road Eugene	OR 97401
9. J. Hager	1656 MANZANA W EUGENE	OR 97401

C. LIST OF INDIVIDUALS WHO
SUBMITTED UNPUBLISHED COMMENTS:

Aasen, Stephen W.
Abedon, Bruce
Abernathy, Lil
Adkins, Ron
Agerter, Paul D.
Alspach, Collin
Anderson, David B.
Anderson, Ed
Anderson, Lester
Andrews, David N.
Andrews, Jerome
Asbury, Ruth W.
Atack, David F.
Atwood, W.R.
Baker, Carroll Y.
Baker, Clifton E.
Balzhiser, Thomas A.
Barber, John L. Jr.
Barber, William
Barnes, Mr. & Mrs. Harvey D.
Becker, Wesley C.
Berg, Mr. & Mrs. William W.
Bergreen, Peter W.
Beutler-Abbey, Nancy
Bierman, Rita and Jerome

Blanchard, Gary W.
Bounds, Pat, Ronald and Robert
Bowerman, McKenzie
Brady, Alta J.
Brandt, Paul
Brandt, Peter M.
Briggs, Richard A.
Brinton, T.F. and Marion
Brock, Gayle
Brown, Kay Lee
Brunk, Gunter W.
Burris, Betty M.
Burris, John H.
Campbell, Glenn A.
Campbell, Margie K.
Cardinal, Roger J.
Carlstrom, David
Carver, John M.
Chackel, Chuck
Chapman, Thomas B.
Churnside, Donald J.
Clark, Dick
Clarke, Dick
Cole, Paul B.
Collins, Kaye
Comstock, Keith

Counts, Chris	Fraser, Robert H.
Crawford, Richard F.	Froyd, Shirley B.
Cross, Hal M.	Fults, Dan
Curtis, Mike	Gabriel, Richard, Judith, Ian and Corey
Dandurand, Eugene	Garrison, Randolph Lee
Dasso, Jerome	Gattis, Mira
Davis, Dixon W.	Gengler, Linda
Dayton, John J. Jr.	Gietter, Ronald T.
Dingman, Corey	Gillilan, Roderic W.
Dodd, Walt	Glau, Bruce
Duncan, Richard J.	Graham, Dan A.
Dunlap, Larry	Gregg, David
Edwards, Ted	Gregg, Susan
Eggleston, Carol	Gries, Jerry
Elsen, Barbara	Gross, John
Epplett, Louis	Grosscup, Richard K.
Epplett, Richard	Gruber, Gerald J.
Evers, Harold-Jr. and Family	Guckenberger, Kenneth E.
Eyster, Edwin	Gudder, Dolly
Feldman, Kenneth N. and Lona L.	Hagberg, Christopher
Ferreira, Bob	Hagberg, Cicely
Fisher, Don	Hagberg, Liz I.
Fisher, Robert L.	Hagberg, Terry L.
Fix, Michael	Hamilton, Emerson
Forbes, James and Christine	Hammer, J.P.
Fox, Judy	Hansen, Howard

Hayes, Beverly	Kime, Scott K.
Hayward, John	Kincaid, R.K.
Heiden, James R.	Kingzett, Ed
Heinzkill, Richard	Kline, Robert F. and Family
Hemphill, William J.	Kocher, John
Henderson, James E.	Koenig, Daniel H.
Hendricks, Tom	Kortge, Dean R.
Hendrix, Greg	Kumm, Brad & Cheryl
Henry, Charles T.	Lafferty, Ralph F.
Hill, Donald H.	Larson, Darryl L.
Hodges, Thomas S.	Lawler, Tom
Hoffman, Lewis	Laxton's, The Walt
Holcomb, Michael S.	LeBrun, Rick
Hughes, George H.	Lewis, Joe
Hughes, Lawrence V.	Libke, Les, Betty and Kirk
Huntington, Lelefte	Lilja, Richard
Irving, John W. & Family	Littlejohn, Maria
Jarvis, Barry S.	Lock, Linda L.
Johnson, Wayne L.	Loe, Jack
Jones, Darrell	Loomis, Kendall D.
Jones, Don Erwin	Love, Glen A.
Kaufman, Mr. & Mrs. Heinz	Loveland, Patricia
Kelley, Treva and Chuck	Lowe, Matt
Kent, Gordon	Luvaas, John L.
Kilcullen, John F.	Madsen, Jeff
Kime, Robert E.	Martin, Gordon G.

Marsh, Richard & Eula
Martz, John
Mathews, Tom
Maxer, B.B.
McCaffree, Bill
McClintic, Richard C.
McCully, Alton & Dorothy
McGee, Dan
McGlasson, George
McNutt, Mary Ellen
McNutt, Michael
Meyer, Alan D.
Meyer, Ronald & Gertraude
Mitchell, Clifford
Mitchell, Curtin
Montoya, Diane J.
Newcombe, Howard G. & Family
Nelson, Keith
Norris, Larry
Parent, Wendy
Parker, Bruce E.
Parrish, Gary L.
Patchen, Ray
Perry, John L.
Piper, David A.
Pittman, S.E.

Prichard, Dennis
Puchaty, Don
Ramsey, Ed, Cathy, Steve & Scott
Ramsey, Taylor
Randall, Linda M.
Redmond, Katherine
Richards, Joe B.
Riddle, J. Bruce
Robbins, Lisa C.
Robbins, Scott B.
Roberts, Edgar N.
Robinson, Matthew
Rodda, John & Rebecca
Sceva, Christine
Schulz, Walter L.
Sciarretta, Thomas N.
Scott, Malcolm & Jackie
Sessler, Bonnie
Shaw, Robert L.
Sherman, B.
Sherman, Leroy F.
Sherman, Keith & Leroy
Simpson, Barbara
Simpson, Larry
Skelton, Steve M.
Skillern, Bill

Skillern, John
Smeed, Glenn Jr.
Smith, Arlan
Smith, Chris A.
Smith, Helen
Smith, Neil
Smith, Roger F.
Smith, Warren E.
Sparks, Mr. & Mrs. David G.
Stephen, Roger A.
Stewart, L.L.
Strand, J.
Taylor, Ed
Terborg, James R.
Theirl, William P.
Thompson, Hale G.
Tilford, James P.
Torrey, James D.

Torgeson, Louis s.
Van Orman, Bill
Walker, Donald E. Jr.
Walker, Katherine E.
Walker, Kay
Walker, Larry
Ward, Virgil D. and Pauline M.
Warren, Robert D.
Weck, Jon A.
West, Mary Ellen
Whetham, Susan & J.D.
Whitman, Robert
Wicklund, Eldon J.
Wildman, A.J.
Wiley, William S.
Wittkop, Frederic C.
Wong, Susan
Wright, Pete Mr. & Mrs.

III. Response to Comments

This section contains letters from Federal, State and local agencies, organizations, and individuals whose letters and comments are published in the FEIS. The list and letters are arranged in alphabetical order.

Following are 1) list of Federal, State and local agencies, organizations and individuals who submitted published comments and 2) published letters with numbered comments and corresponding numbered responses.

1. LIST OF FEDERAL, STATE AND
LOCAL AGENCIES, ORGANIZATIONS
AND INDIVIDUALS:

FEDERAL AGENCIES

Advisory Council On Historic
Preservation

U.S. Department of Agriculture
Office of Equal Opportunity

U.S. Department of Agriculture
Soil Conservation Service

U.S. Department of the Army
Corps of Engineers

U.S. Department of Commerce
National Oceanic and
Atmospheric Administration
National Marine Fisheries
Service

U.S. Department of Commerce
National Oceanic and
Atmospheric Administration
Office of the Administrator

U.S. Department of Interior

U.S. Department of
Transportation Coast Guard

U.S. Environmental Protection
Agency

STATE AGENCIES

Department of Environmental
Quality

Department of Fish and
Wildlife

Executive Department

State Representative
Larry Hill

University of Oregon Assistant
Dean

University of Oregon College
of Business Administration

University of Oregon Forest
Industries MBA Group

LOCAL AGENCIES

City of Eugene

City of Oakridge

Florence Area Chamber of
Commerce

Lane Council of Governments

Springfield Area Chamber of
Commerce

ORGANIZATION AND INDUSTRIES

Associated Oregon Loggers,
Inc.

C. Gene Hand and Co.

Fur Takers of America

Home Fabrics

Izaak Walton League of
America, Inc.

Mazamas

Many Rivers Group, Sierra
Club

Marys Peak Group, Sierra Club

Native Plant Society of Oregon

Obsidians

Oregon Natural Heritage Data
Base

Scharpf's Twin Oaks Builders
Supply Co.

Schautt, Stemm and Wild, Inc.

Skeie's Jewelers, Inc.

Waldo Wilderness Council

Willamette Pass Ski
Corporation

INDIVIDUALS

Arnis, Matthew

Bergsma, Audrey

Bidleman, Faye L.

Bloker, Sherry

Bolander, Peter

Borgias, Kristofer

Clay, Steve

Conway, Flaxen D.L.

Cook, Tom

Eaton, Joyce

Eaton, Will

Ewing, Bert

Fjordbeck, Denise G.

Gautier, Clay

Glines, Althea

Greer, Barry

Guttormsen, Gary

Hall, Vernon

Hanley, Laurel

Herbert, Sydney

Hermach, George R.

Hock, Doreen J.

Johnson, Vi

Jolley, Russ

Jones, Michael S.

Kinsbury Jr., G.C.

Lovinger, Nena B.

MacDonald, Sheryl A.

Mahan, Sheila

Marquis, Lee

Maxwell, Winston E.

Morris, Greg

Niemeyer, Brian

Norberg, Russell L.

Nording, Don, Charlotte
and Family

Pastor, Richard A.

Perry, John C.

Pidgeon, Karen & Donald R. Wagne

Plant, Helmut R.

Robinson, Peggy

Rygh, John

Seide, Curtis

Senders, Roger

Skelton, Brad C. & Laurel
M. Schultz

Stewart, Bradley c.

Talberth, John

Tepfer, Sanford S.

Tschersich, Hans U.

Utzinger, Donald R.

Van Cise, Glenn

Wiltse, Donald D.

Zakel, Jeff

Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW #809
Washington, DC 20004

Reply to: 730 Simms Street, Room 450
Golden, Colorado 80401

January 29, 1985

Michael A. Kerrick,
Forest Supervisor
U. S. Forest Service
Willamette National Forest
211 East Seventh Street
P.O. Box 10607
Eugene, OR 97440

REF: Willamette Pass Ski Area

Dear Mr. Kerrick:

We have received and reviewed the Draft Environmental Statement (DES) for the above-referenced project. The DES states that the undertaking has potential for affecting cultural resources listed in or eligible for listing in the National Register of Historic Places (National Register). However, we find that actions designed to mitigate adverse effects on National Register eligible properties are appropriately described in this draft document. As you are aware, circulation of the DES does not fulfill FS responsibilities under Section 106 of the National Historic Preservation Act. The process for achieving compliance with Section 106 is set forth in the Council's regulations, 36 CFR Part 800.

Council staff will be pleased to assist you in obtaining compliance with Section 106 of the Act.

Should you have any questions, please contact Dean Shinn of my staff at 766-2682, an FTS number.

Sincerely,

Robert Fink
Chief, Western Division
of Project Review

2-4-85 CC sent on bridge
.. routed in 50

RESPONSE TO COMMENTS FROM ADVISORY COUNCIL ON HISTORIC PRESERVATION

1. As stated in the EIS for the Willamette Pass Ski Area expansion (page 25), a cultural resource inventory was performed by an agency archaeologist under the guidelines of the Willamette National Forest Cultural Resource Inventory Plan. The inventory did not locate any cultural resources or National Register properties or eligibles. Therefore, the archaeologist acting for the Forest Service determined that the project as proposed has NO EFFECT upon any listed or eligible cultural resources. The Willamette Pass Ski Area EIS Cultural Resource Report and documentation of 36 CFR 800 compliance is located in the analysis file of the FEIS.



United States
Department of
Agriculture

Office of
the Secretary

Office of
Equal
Opportunity

Washington, DC
20250

FEB 26 1985

SUBJECT: Review of Draft Willamette Pass Alpine Winter Sports
Site - Environmental Impact Statement

TO: Michael A. Kerrick
Forest Supervisor
Willamette National Forest
211 East Seventh Street
Post Office Box 10607
Eugene, Oregon 97440

THRU: R. Max Peterson
Chief
Forest Service

We have reviewed the draft Willamette Pass Alpine Winter Sports Site Environmental Impact Statement. Our review focused on assessment of the effects of the proposed action upon minorities, women, the aged and handicapped persons residing in or near the project area.

We believe the final report can be improved if a statement is included to indicate whether the proposed project will have a negative impact on minorities, women, the aged and handicapped persons. 1

We also suggest you include in the plan a program to inform the area's minority and female populations of job possibilities during and after construction. The plan can be further strengthened by providing census data on the racial mix of the population within commuting distance of the project area. 2

We appreciate the opportunity to comment on the draft, and look forward to receipt of the final plan.

Alma R. Esparza
Alma R. Esparza
Director

FOREST SERVICE
RECEIVED

MAR 1 1985

CHIEF'S OFFICE

*3-4-85 CC Sent to Albuquerque
"no mailed in SD"*

RESPONSE TO COMMENTS FROM U.S. DEPARTMENT OF AGRICULTURE: OFFICE OF EQUAL OPPORTUNITY

1. A statement to this effect was included in the EIS, Environmental Consequences chapter (page 55).

A provision in the special use permit states that the permittee must comply with Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973 as amended by the Rehabilitation Comprehensive Services and Developmental Disabilities Amendment of 1978 and all requirements imposed by or pursuant to the regulation of the United States Department of Agriculture (7 CFR, part 15) issued pursuant to that act, and hereby assures that in the operation and performance of this permit to take immediately any measures necessary to effectuate this requirement.

2. Census data on the racial mix of the population may be obtained from the Willamette National Forest Economic Overview which is available from the Willamette National Forest Headquarters.



United States
Department of
Agriculture

Soil
Conservation
Service

1220 S. W. Third Avenue
16th Floor
Portland, Oregon 97204

February 12, 1985

Michael A. Kerrick, Forest Supervisor
Willamette National Forest
211 East Seventh Street
Eugene, Oregon 97440

My staff have reviewed the DEIS for the Willamette Pass Alpine
Winter Sports Site and have no comments to offer.

Jack P. Kanalz
JACK P. KANALZ

State Conservationist

cc:

Thomas M. Shiflet, Director ECS, SCS, Washington, D.C.

The Soil Conservation Service
is an agency of the
Department of Agriculture



1-19-85 received by
1-19-85 received by



DEPARTMENT OF THE ARMY
PORTLAND DISTRICT CORPS OF ENGINEERS
P. O. BOX 3118
PORTLAND, OREGON 97208

February 13, 1985

Planning Division (PL-NR-EQ)

Mr. Michael A. Kerrick
Forest Supervisor
Willamette National Forest
211 East Seventh Street
P. O. Box 10607
Eugene, Oregon 97440

Dear Mr. Kerrick:

The Willamette Pass Alpine Winter Sports Site Draft Environmental Impact Statement was referred to us for review by the North Pacific Division, Corps of Engineers and we have the following comment. If the construction of parking lots, roads or structures would require the placement of fill material in any streams or wetlands, a Department of the Army Permit may be required under Section 404 of the Clean Water Act. For information concerning permit requirements, please contact our Regulatory Functions Branch at the above address, Attn: NPPOP-R, telephone (503) 221-6995. (1)

Thank you for the opportunity to review this document.

Patrick S. Keough
Patrick S. Keough, P. E.
Chief, Planning Division

2-19-85 CC and subdivide
.. nation 30

RESPONSE TO COMMENTS FROM U.S. DEPARTMENT OF THE ARMY: CORPS OF ENGINEERS

1. No wetlands or streams will be directly affected. For off-site effects refer to Environmental Consequences section (page 32).



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

ENVIRONMENTAL & TECHNICAL SERVICES DIVISION
800 EAST MAIN STREET, SUITE 250
PORTLAND, OREGON 97211 1775
(503) 230 5400

February 26, 1985

F/NMFS-341

Michael A. Kerrick, Forest Supervisor
Willamette National Forest
211 East Seventh Street
P.O. Box 10607
Eugene, OR 97440

Re: DUIS 0501.03 - Willamette Pass Alpine Winter Sports Site

Dear Mr. Kerrick:

Review of the DEIS indicate there are no anadromous fish present in the proposed development area. Since anadromous fish would be the primary resource of concern to our agency we have no comments on the proposed development.

Your coordination efforts are sincerely appreciated.

Sincerely yours,

Dale Evans
Division Chief

cc: Gordon Haugen, USFS

3-1-85 CC sent out by
3-1-85 CC noted in SO.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Washington D.C. 20230

OFFICE OF THE ADMINISTRATION

February 25, 1985

Mr. Michael A. Kerrick
Forest Supervisor
211 East Seventh Street
P.O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick:

This is in reference to your draft environmental impact statement for Proposed Expansion of Willamette Pass Alpine Winter Sports project. Enclosed are comments from the National Oceanic and Atmospheric Administration.

We hope our comments will assist you. Thank you for giving us an opportunity to review the document. We would appreciate receiving four copies of the final environmental impact statement.

Sincerely,

Joyce M. Wood
Joyce M. Wood
Chief, Ecology and
Conservation Division

Enclosure

DC:lg



3-4-85 cc sent to Kerrick
" mailed in SD



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Washington, D.C. 20230

February 21, 1985

N/MB2:KEZ

De 2/25

TO: PP2 - Joyce M. Wood

FROM: N - Paul M. Wolf

SUBJECT: DEIS 8501-03 - Proposed Expansion of Willamette Pass Alpine Winter Sports Site (Deschutes and Willamette National Forests, Klamath and Lane Counties, Oregon)

The subject DEIS has been reviewed within the areas of the National Ocean Service's (NOS) responsibility and expertise, and in terms of the impact of the proposed action on NOS activities and projects.

Geodetic control survey monuments may be located in the proposed project area. If there is any planned activity which will disturb or destroy these monuments, NOS requires not less than 90 days notification in advance of such activity in order to plan for their relocation. NOS recommends that funding for this project includes the cost of any relocation required for NOS monuments. For further information about these monuments, please contact Mr. John Spencer, Chief, National Geodetic Information Branch (N/G617), or Mr. Charles Novak, Chief, Network Maintenance Section (N/G6162), at 6001 Executive Boulevard, Rockville, Maryland 20852.



RESPONSE TO COMMENTS FROM U.S. DEPARTMENT OF COMMERCE, NATIONAL
OCEANIC AND ATMOSPHERIC ADMINISTRATION

1. Thank you for your input. Cost of relocation of any geodetic survey control monuments will be incurred by the permittee.



United States Department of the Interior

OFFICE OF THE SECRETARY

PACIFIC NORTHWEST REGION
500 N.E. Multnomah Street, Suite 1602, Portland, Oregon 97232

March 1, 1985

ER 85/101

Mr. Michael A. Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97440

Dear Mr. Kerrick:

The Department of the Interior has reviewed the draft environmental statement for the Willamette Pass Alpine Winter Sports Site, Deschutes and Lane Counties, Oregon. The following comments are provided for your use and consideration when preparing the final document.

Mineral Resources

The draft environmental statement does not address mineral resources and the beneficial and adverse impacts of the proposed facilities upon mineral development in the area. The Mineral Industry Location System (MILS) records indicate two mineral properties in the general area, though not within the actual site. Our record examination of the MILS was not exhaustive, nor is it a definitive statement of the mineral potential of the area.

We suggest that a review of the project be made by the U.S. Forest Service Zone Minerals Staff and a summary of the mineral evaluation and impacts from the project be included in the final environmental statement.

Cultural Resources

The DEIS does not adequately address cultural resource impacts. There is insufficient information to determine whether any of the alternatives considered, including the preferred one, could adversely impact National Register and eligible cultural resources that might be present. Although the known listings for such properties have been consulted and you have referred to the negative results of a nearby Forest Service survey of the upper Skyline Creek area in 1984, we believe that there still may be a high probability that the Skyline Creek area contains archeological sites.

So that the position of the 1984 survey will be understood in relation to the Winter Sports Site alternative locations, the DEIS should delineate the survey coverage on a map, indicate the visibility at the time of survey, and discuss the survey methods. It should also explain why it was decided that a survey for cultural resources would not be performed at these locations if that is the case. The explanation should be based on a professional assessment of the potential for such resources to occur at this altitude and location in the Oregon Cascades. This is particularly important in view of increasing discoveries of high altitude sites in the West that have recently advanced our knowledge of seasonal and climate-related prehistoric use of such areas.

3-7-85
CC sent radiology
re: relocation

Fish and Wildlife Resources

Of the alternative development plans presented, Alternative IV, the preferred alternative, would increase deer and elk forage but would, to some extent, disrupt use of deer and elk summer range and adversely impact wolverine, fisher, and marten habitat. Mitigation for these impacts as described in the statement needs to be expanded. Specific comments are provided below.

Page 28. Biological Environment. Wildlife. This section should include a description of the fish and fishery resources of the streams and lakes in the project area. What influence Salt Creek and Skyline Creek have on the Gold Lake Bog should also be described.

Page 48, paragraph 4. More information is needed on the value of the flat saddle area as a travel corridor for big game. If this area is crucial to deer and elk movement, then even the relocation of the Summit Lodge some 200-300 feet to the northwest of the saddle would not alleviate detrimental impacts to big game populations. Therefore, to minimize impacts on wildlife, particularly big game and wolverine, we recommend that an alternative which eliminates the Summit Lodge and limits recreational development to the south sides of Eagle and West Peaks be selected as the preferred plan.

Water Resources

The increased number of skiers under the proposed expansion of the Willamette Pass Alpine Winter Sports Site will require much more water than is needed under the current level of operations. For each of the alternatives the statement should estimate current and anticipated water demands, discuss the source(s) of the water supplies, and assess impacts of the use of the water on ground water resources and on the project. The topic of periodic testing to ensure good quality of potable water should also be addressed.

Data on pre-project water quality in Skyline, Sleepy Hollow, and Salt Creeks compared to post-project water quality would be useful. It is not clear how runoff from construction activities would be controlled. We are particularly concerned about the possibility of oil, grease, and/or fuel entering the water system and being transported to streams or wetlands in the vicinity.

Thank you for the opportunity to comment.

Sincerely,

Charles S. Palitka
Regional Environmental Officer

RESPONSE TO COMMENTS FROM U.S. DEPARTMENT OF THE INTERIOR

1. A section describing the mineral potential has been added to the Affected Environment.

The Willamette Pass rock quarry is located adjacent to the permittee's parking lot south of Highway 58. The rock pit contains 250,000 cubic yards of rock in place. This would be equivalent to 333,000 cubic yards of crushed rock. At a price of \$.25 per yard, the value of the crushed rock equals roughly \$2.1 million.

Expansion of the parking lot will not interfere with the operation or expansion of the rock quarry.

2. An adequate cultural resource inventory was performed on all areas affected by the alternatives proposed by the EIS. The inventory was designed and implemented in 1984 by an agency archaeologist utilizing a combination of probability and opportunistic sampling. Areas such as Skyline Creek, springs, wet areas, flats, saddles, etc., were given "high probability" status. In addition, areas adjacent to, but outside the limits of proposed expansion, were also inventoried during 1984. The specific design justification and survey maps are located in the Willamette Pass Ski Area EIS Cultural Resource Report located in the analysis file on Oakridge Ranger District, Willamette National Forest. Copies of this report and a Determination of Effect were forwarded to the Oregon State Historic Preservation Officer for concurrence, in compliance with 36 CFR 800 regulations. The project as proposed was determined to have NO EFFECT on any listed or eligible properties to the National Register. Should a final decision be made to implement one of the action alternatives, the district archaeologist will monitor operations to assure compliance should cultural resources be encountered during ground-disturbing activities related to this project. (Paul Claeyssoens, 3/26/85).

3. Mitigation for impacts described are discussed in more detail in the Wildlife Assessment, attached in Appendix C. Wolverine mitigation is considered in Response to Comments by Waldo Wilderness Council.

4. Refer to Affected Environment (page 20) and Environmental Consequences (page 41) sections. Fisheries information has been added to the text.

5. A detailed discussion of the significance of the saddle between Eagle and West Peaks, and other areas of heavy big game use is found in the Wildlife Assessment which is attached in Appendix C.

RESPONSE TO COMMENTS FROM U.S. DEPARTMENT OF THE INTERIOR, CONT.

We feel that continued use of the saddle depends on the amount of spring and summer activity involving the proposed Summit Lodge. If the Lodge is used for public recreation during the summer, there is little doubt that big game use would be severely impacted, even if the Lodge were moved to the northwest.

However, if spring and summer use of the Lodge were restricted to necessary maintenance only, impacts could be substantially less. Elk continue to use the south slopes of Eagle Peak with their current levels of human activity. They are accustomed to using the saddle as a travelway and if the presence of humans was minimized during spring and early summer, we are reasonably optimistic they will continue to do so.

Based on the above consideration, public use of the Summit Lodge during the off-season will be restricted.

6. See response number 6 to Environmental Protection Agency. The permittee conducts periodic testing of their well water as required by the Klamath County Sanitation Department and the special use permit.

7. See response numbers 3 and 5 to the Environmental Protection Agency.



Washington, DC 20540-3
Staff Symbol
Phone (202) 426-3300

Commandant
United States Coast Guard

16477-4b(0001)
23 Jun 85

Mr. Michael A. Kerrick
Forest Supervisor
Willamette National Forest
211 East Seventh Street
Post Office Box 10607
Eugene, Oregon 97440

Dear Sir:

We have reviewed the Draft Environmental Impact Statement for the Willamette National Forest in Oregon. We have no comments to offer at this time.

We appreciate the opportunity to assist your efforts in the development of this documentation. We look forward to continued mutual cooperation and coordination of these projects.

Sincerely,

W. M. McGovern

W. M. MCGOVERN
Chief, Environmental Compliance and Review Branch
Planning and Evaluation Staff
By direction of the Commandant

2-1-85 CC sent to Mr. Kerrick
" routed to 30

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION X

1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101



FEB 21 1985

REPLY TO
ATTN OF M/S 443

Michael A. Kerrick, Forest Supervisor
Williamette National Forest
P. O. Box 10607
Eugene, Oregon 97440

Dear Mr. Kerrick:

The Environmental Protection Agency (EPA) has reviewed the Williamette Pass Alpine Winter Sports Site Draft Environmental Impact Statement (DEIS) prepared by your office. The DEIS addresses the proposed expansion of the Williamette Pass Ski Area in the Cascade Mountains of central Oregon. The following are EPA's comments and rating of the DEIS in accordance with our responsibility under Section 309 of the Clean Air Act to determine whether the impacts of proposed Federal actions are acceptable in terms of environmental quality, public health, and welfare.

General

Supporting documentation and literature citation is generally lacking in the DEIS. This is true both for descriptions of existing conditions and assessments of potential impacts. Topics for which additional documentation is particularly important are noted individually.

The impacts of moving a portion of the Pacific Crest Trail should be addressed in greater detail. Effects from construction and use of the new trail portion on wildlife, erosion, etc. should be highlighted.

Air Quality

Normally, a project of this magnitude would not warrant a detailed air quality investigation; serious health-related air quality problems are not expected. However, the proximity of the development to a PSD Class I area (the Diamond Peak Wilderness Area) justifies a somewhat more rigorous air quality impact analysis than provided. Under the Clean Air Act, Class I areas are afforded stringent protection against air quality degradation.

The first step in such an analysis should be to quantify the increases in air emissions due to the proposed project. These emissions estimates should include carbon monoxide (CO) from automobiles, particulate matter (PM) from unpaved parking lots and roads, and CO and PM from woodstoves and fireplaces. (These last sources may be affected by an Oregon emission standard which will go into effect in July 1986.) Simple screening techniques can then be used to estimate the impacts on local air quality. Also, the impacts of the PM emissions in the Class I area can be estimated and compared with the PSD increments. Furthermore, the effects of the PM emissions on visibility in the Class I area should be considered.

Water Quality

Results of pre-project water quality assessments should be provided in the Final EIS. At a minimum, these should include temperature, dissolved oxygen, suspended solids, and pH values for all waters potentially affected by project development. In particular, the present water quality of Skyline Creek, Douglas Horse Pasture, Salt Creek, and Gold Lake Bog/Gold Lake should be documented. Seasonal flow characteristics for Skyline Creek would be helpful.

The location of the existing wastewater drainfield should be shown, and the quality of the surface water immediately below it should be characterized as noted above, with the addition of coliform bacteria counts. A program should be proposed for monitoring the effectiveness of the waste treatment system after project development is complete. Details of the sewage treatment and water supply systems for the proposed Summit Lodge should be provided in the Final EIS.

It is unclear in the DEIS how any runoff potentially tainted with salt, oil, etc. will be kept from reaching streams or the groundwater. Will such control include parking lot, fuel storage, and maintenance areas? What will become of this potentially tainted runoff? These topics should be discussed in some detail. Also, the third mitigation measure under the heading of "Water" for Alternative III (pages 11-12 in the DEIS) should apply equally to Alternative II.

It is asserted that there are "adequate water supplies to serve projected needs." Does this include instream flows for fish, etc.? Needs should be defined and supply adequacy documented.

The existing development's impacts on runoff, erosion, and stream sedimentation should be described. Together with an evaluation of effects at other ski areas, this would help predict the effects of the proposed development. For example, what potential is there for the proposed snow management technique to alter the duration and rate of snowmelt? Could such alterations impact stream flow characteristics and fish resources?

Fish

Fish habitat and resources in Skyline Creek, Douglas Horse Pasture, Salt Creek, Gold Lake Bog Research Natural Area, Gold Lake, and Odell Lake should be described. The potential for impacts to these areas should be discussed in some detail.

Wildlife

Wildlife discussions, in particular those dealing with wolverine (a threatened species in Oregon), should be better documented. Bear and cougar should be included as potentially using the project area.

Descriptions of deer and elk use, including the prediction that forage habitat will be improved by project development, imply that increased human activity will not displace the animals. The potential impacts to wildlife from summer recreation activities in the area should be addressed in detail in order to support such predictions. The relative importance of the game travel corridor across the saddle (site for the proposed Summit Lodge) should also be evaluated.

The sentence on page 48 "Additional impacts including the Gold Lake - Douglas Horse Pasture area could be much more significant" requires clarification. What additional impacts?

Mitigation measures for wildlife impacts should include consideration of the feasibility of eliminating or minimizing Summit Lodge construction activities in the spring and early summer, when importance of this area to wildlife is apparently at its peak.

The recent designation of wilderness area near Waldo Lake does not create new wolverine habitat; rather, it provides that less of the existing and dwindling habitat will be lost. This does not mitigate for possible losses in the project area. Such references (page 49) should be deleted and other mitigation measures should be proposed, as appropriate.

Vegetation

A detailed description of the "special habitat types" in and near the project area should be provided, including assessment of impacts and the potential for mitigation.

Rating of the DEIS

Based on our review and in consideration of the above comments, the Williamette Pass Alpine Winter Sports Site DEIS is rated as EC-2 (Environmental Concerns - Insufficient Information). A summary of the EPA rating system for EISs is attached.

Thank you for the opportunity to review the DEIS. We would be glad to discuss our comments with you. If you have any questions, please contact Brian Ross of our EIS and Energy Review Section at (208) 442-8516.

Sincerely,

Robert S. Burd
Robert S. Burd
Director, Water Division

Attachment

cc: USFWS, K. Larson
OOO, M. Gearheard
ODF&H, T. Faust
ODEQ
Waldo Wilderness Council, J. Zakel

POLICY AND PROCEDURES

NUMBER OF RATING DEFINITIONS AND FOLLOW-UP ACTIONS*

Environmental Impact of the Action

10--Less of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided to the extent they prevent the environment. Corrective measures may require changes to the proposal. The review has identified environmental impacts that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided to order to provide adequate protection for the environment. Corrective measures may require substantive changes to the proposal. EPA is not in a position to consider or approve other project alternatives (including EPA no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EO--Environmentally Unacceptable

The EPA review has identified serious environmental impacts that are of sufficient magnitude that they are unacceptable from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential environmental impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the GEO.

Idea given the Impact Statement

Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impacts of the proposed alternative and those of the other alternatives available to the project or action. No further analysis or additional information is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment. At the EPA reviewer has identified new reasonably available information that should be included within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analysis, or discussion should be included in the final EIS.

Category 3--Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available information that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analysis, or discussion is necessary to assess the impacts of the action. The reviewer should advise the lead agency that they should have full public review of the draft EIS. EPA does not believe that the draft EIS is adequate for the purpose of the NEPA and/or Section 109 review. The draft EIS should be formally reviewed and made available for public comment in a supplemental draft EIS. On the basis of the potentially significant impacts identified, this proposal could be a candidate for referral to the GEO.

*From EPA Manual 1000 Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Figure 4-1

1. Supportive documentation and literature citations from Federal, State and local agencies, and other consultants where available are included in the FEIS. Discussions with specialists, are noted as personal communication in the text; records of these conversations are available for review at the Oakridge Ranger Station.
- 1a. The proposed route leaves the PCHST just west of Malden Peak Saddle and will traverse the east side of the ridge extending north between Skyline Creek and Malden Peak. After crossing an open flat area on the northern end of the ridge, the route descends northwest where it intersects the existing PCHST, about one mile south of Bobby Lake.

The three mile route passes through predominately mature stands of mountain hemlock with some open areas of scattered lodgepole pine, western white pine, and Pacific silver fir. Ground cover is mostly scattered red huckleberry. Constructing an 8 foot by 10 foot corridor with an 18 inch tread will require removal of small trees, shrubs, and branches of larger trees. Since the forest is mostly open, the need to remove large trees to make way for the trail will be minimal.

In order to minimize soil erosion, special attention will be given to construction methods. Grade will be limited to 10% to minimize erosion due to runoff. Tread will be outslotted to prevent water from collecting and running down the trail. Water dips or water bars of natural material will be used in areas where outslotted tread is not possible. Even with the above erosion prevention measures, it is anticipated that due to soil compaction from use, some localized erosion will occur over time.

To minimize the human disturbance of wildlife in the area, the trail will be carefully located to avoid critical wildlife habitat areas like meadows and small lakes. Summer use of Douglas Horse Pasture by deer and elk will be especially enhanced by a reduction in displacement by hikers when the Pacific Crest Trail no longer parallels Skyline Creek. Short-term displacement of deer and elk during trail construction in localized areas is anticipated. No adverse effects on marten or fishers are expected due to the intermittent use the trail segment is expected to receive.
2. The proposed alternatives will have a negligible effect on air quality both locally in the project area and in the Diamond Peak Wilderness, a Class I area. Dispersal and vertical mixing conditions are excellent due to the project's location.

- Though additional vehicle use in the area is anticipated in the maximum development alternative, there is no evidence to indicate that carbon monoxide (CO) levels will be in excess of National Ambient Air Quality Standards. Any CO production from woodburning devices is likewise judged to be insignificant.
- In our opinion it is judged that both will be undetectable in the Diamond Peak Wilderness (personal communication, Woody Williams, Assistant Fire Staff, Willamette National Forest and Dale Gardner, Fire Management Officer, Oakridge Ranger District).
- Any increase in any particulate matter (PM) produced as a result of debris burning/wood heating (wood smoke), power equipment (diesel smoke), and construction and traffic on unpaved roads (dust) will be minor and have no quantifiable impact on the project area or the Diamond Peak Wilderness. Neither source of total suspended particulate (TSP), therefore, is felt to be significant and any emissions will be well within the forest's allowable increment for prevention of significant deterioration (PSD).
- As indicated, the project's geographical location encourages excellent horizontal dispersal and vertical mixing of any PM and CO emissions. Daytime thermal heating in the Salt Creek drainage to the west, plus a prevailing westerly air flow, both combine to give a net west to east movement of air through and around Willamette Pass during all but substantial east wind episodes. In addition, the Pass's "Venturi" effect, plus its proximity to higher elevation gradient winds, make this an excellent area for dispersal/mixing in both the horizontal and vertical dimensions. As a result, this area sits above the inversion layer and experiences some west to east movement of air even during periods of large-scale air stagnation at lower elevations.
- As a result of geographic influences on both local and larger-scale meteorology, no effects on the Diamond Peak Class I area are anticipated, even though it is in close proximity to the project area. For these same reasons, any degradation of airsheds of the Willamette Valley and populated areas of Central Oregon is extremely unlikely.
3. Pre-project water quality for seasonal flow data is not available for the streams, lakes, and meadows mentioned. This information is not considered critical to making a rationale decision regarding the proposed expansion.

4. The drainfield is located between the base lodge and the Summit Chairlift (A). A copy of the site plan and construction drawings are available for review at the Oakridge Ranger District and Supervisor's Office in Eugene. The Oregon Department of Environmental Quality (DEQ) is responsible for monitoring the effectiveness of the waste treatment systems. The permittee analyzes the quality and quantity of the effluent (BOD-5, TSS, total flow, and volume of septage pumped and location of disposal) regularly and sends reports to DEQ as required. The FEIS describes the environmental effects of the Summit Lodge in concept; details of the sewage treatment and water supply systems for the proposed Summit Lodge are not available at this time. Prior to construction, the permittee will submit plans to the Lane County Health Department and construction specifications (including results of test pits). The County will decide whether the proposed systems are adequate with the possible assistance of DEQ.
5. Surface water will be diverted away from parking lots, roads, fuel storage, and maintenance areas. This will be accomplished by outslowing roads and parking lots, constructing berms around fuel storage areas, and waterbars on access roads. The permittee will be required to sample runoff to see if pollutants are detected. If necessary, tainted surface water can be run through a grease and oil separator to remove pollutants.
- The mitigation measure has been added to Alternative II (page 6).
6. No quantitative information on groundwater supplies is available for the Willamette Pass area. The existing well is capable of delivery of a constant 25 gallons of water per minute, or 500 gallons per hour. Assuming an eight hour operating day and 7.5 gallons per person, the present water capacity is 400 people at one time. One or two additional wells would probably be necessary to accommodate expansion Alternatives IV through VI, assuming that conditions are similar. Based on the water well drilled for Phase I developments, ground water supplies are expected to be adequate for all alternatives (Fred Lisher, Oregon Water Resource Division). If a problem does arise, use of ground and surface water supplies will be distributed in accordance with state water rights.
- Adequate water supplies refers to ground water resources. Surface water may increase slightly (as discussed in the text on page 32) which would increase the instream flows for fish.

7. Refer to Response to Comments from Waldo Wilderness Council, numbers 7 and 36, and Appendix G.
- As stated in Response to Comments from Waldo Wilderness Council, number 7, maximum spring runoff in water drainages in the immediate area may be reduced. The area that would be affected by snow grooming on the north-facing slopes will be from 25 to 78 acres (Alternatives III through VI). The entire Gold Lake Watershed encompasses approximately 11,000 acres (Oakridge Ranger District Resource Data Base).
- Based on the above data, the project area on the north-facing slope is two-tenths to seven-tenths of one percent of the Gold Lake Watershed. Consequently, the small changes in stream flow characteristics affecting fisheries resources will be negligible in light of the small percentage of the watershed affected.
8. Refer to Affected Environment (page 20) and Environmental Consequences (page 41) sections. Fisheries information has been added to the text.
9. Documentation has been expanded both in the wildlife assessment (see Appendix C) and in responses to comments. Bear and cougar are considered in the assessment.
10. See response number 47 to the Waldo Wilderness Council Comments and response number 7 to the Oregon Department of Fish and Wildlife Comments.
11. We anticipate no impacts to wolverine use of the Gold Lake area. Wolverine use of Douglas Horse Pasture could be reduced because of displacement resulting from noise of grooming equipment and increased human activity within 1200 feet of the area.
12. We agree with this comment. A mitigation measure which restricts D, E and G lifts, Summit Lodge, and catchline road construction activities from mid to late summer has been added (page 11).
13. We agree with this comment but this statement was not proposed as mitigation for loss of wolverine habitat. The statement was included under Environmental Consequences: Effects on the Biological Environment, not under the mitigation section. Based on this comment, this section has been deleted from the text to eliminate any misunderstanding that may have occurred. Mitigation measures are outlined in the Environmental Consequences chapter under the Mitigation heading (page 40). See definition of mitigation in CEQ 1508.20.
14. See Willamette Pass Area: Sensitive Plants Narrative and Zonal Vegetative Composition Narrative (paragraphs 2, 4, and 6), Appendix F.



Department of Environmental Quality

CENTRAL REGION

2150 NE STUDIO ROAD, BEND, OREGON 97701 PHONE (503) 388 6146

February 14, 1985

Mr. Michael A. Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Bend, OR 97440

S - Willamette Pass Ski
Corporation
Klamath County

Dear Mr. Kerrick:

I have the following comments on the Willamette Pass Ski Area draft environmental statement:

1. The intermittent recirculating sand filter which serves the lodge and other buildings in the base area is approved for an average daily flow of 12,500 gallons per day. The Wastewater Pollution Control Facilities (WWCF) permit for this facility is being modified and will include this limit. This sand filter may not be able to adequately treat 24,000 gallons of sewage per day as is inferred in the draft environmental statement. It is certainly not permitted to handle that much flow at this time. The 12,500 gallon-per-day flow limit will be reviewed as we receive performance data for the filter and may be changed depending upon how well the filter works.
2. I feel that the assumed sewage flow of 5 gallons per person per day as stated in the draft environmental statement is too low. Water use and attendance data from Mt. Hood Meadows ski area shows that about 7.5 gallons of sewage is generated per person per day at that facility. The Willamette Pass Ski Corporation is required to keep track of the daily sewage flow to its sand filter. We would use this data, if there is enough of it when it is needed, in projecting the sewage flow for new facilities at the ski area such as the proposed Summit Lodge.
3. For your information the division of responsibilities (site evaluation, plan review, permit and inspections) between Klamath County and the DPO for on-site sewage disposal system are as follows:

- a. The county has complete responsibility for systems with a projected sewage flow of 2500 gallons per day or less.
- b. For systems with a projected sewage flow between 2500 gallons per day and 5000 gallons per day the county is responsible for everything except plan review which is done by the DPO.

2 14-85 18 Permit only '85
"New Facility"

Mr. Michael A. Kerrick
February 14, 1985
Page Two

c. The DPO has complete responsibility for systems with a projected flow of 5000 gallons per day or more.
There is an exception to the above for sand filter systems. If the projected flow for a facility served by a filter is greater than 600 gallons per day, then the DPO must do the plan review.
Thank you for the opportunity to comment.

Sincerely,

Thomas D. Hall
Thomas D. Hall

pc:Willamette Pass Ski Corporation
Klamath County Environmental Health Dept.
Water Quality Division,
DPO Portland

Rec'd 3/11/85

Department of Environmental Quality

CENTRAL REGION

2150 N.E. STUDIO ROAD, BEND, OREGON 97701 PHONE (503) 388-6146

March 15, 1985

Mr. Michael A. Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, OR 97440

S - Willamette Pass Ski
Corporation
Klamath County

Dear Mr. Kerrick:

This is to clarify the comment I made in my February 14, 1985 letter to you regarding the sewage flow limit for the sand filter at the Willamette Pass Ski area. As stated in that letter, the average daily sewage flow limit is set at 12,500 gallons per day in the company's permit. This flow limit pertains to the quantity of flow passing through the filter.

On weekends and holidays the sewage flow from the lodge and other facilities served by the sand filter is likely to exceed 12,500 gallons per day. There is a 36,000-gallon surge basin ahead of the filter to temporarily store this excess flow. Then, during the week when the flow to the filter is usually well below 12,500 gallons per day, the excess flow is treated. With this arrangement the flow passing through the filter can always be kept at or below 12,500 gallons per day.

Sincerely,

Thomas D. Hall
Thomas D. Hall

cc: Willamette Pass Ski Corporation
Water Quality Division,
DPO Portland

RESPONSE TO COMMENTS FROM OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
2/14/85

1. This information has been incorporated into the FEIS.
2. The estimated flow has been changed from 5 to 7.5 gallons.

RESPONSE TO COMMENTS FROM OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
3/15/85

1. This information has been included in the FEIS.



Department of Fish and Wildlife

506 S.W. MILL STREET, P.O. BOX 3503, PORTLAND, OREGON 97208

February 28, 1985

Michael A. Kerrick
Forest Supervisor
Willamette National Forest
211 East Seventh Street
P.O. Box 10607
Eugene, Oregon 97440

Dear Mike:

We have completed review of the Willamette Pass Ski Area DEIS and our comments and recommendations are attached.

We will be happy to discuss our comments with you or answer any questions you may have. Please contact Mike Heland of our Environmental Management Section at 229-5433.

Sincerely,

John R. Donaldson
John R. Donaldson, PFD
Director

bjs
Enclosure
cc R. Rousseau
D. Lantz

3-7-85
CC sent outside
"noted in SD"

Oregon Department of Fish and Wildlife Comments on
Willamette Pass Ski Area Draft Environmental Impact Statement
February, 1985

General Comments

The draft EIS in our estimation, does not adequately justify why Alternative IV (preferred) is better than any other alternative listed. As mentioned on page 1 of the DEIS, the intent of the analysis was only to "display and compare" alternatives to the proposal. There does not appear to be any justification for designating the preferred alternative.

We did not have the opportunity to review the total environmental analysis with the exception of the risk criteria identified for wolverine, prior to the final draft.

Based on the following "Fisheries" and "Wildlife" concerns, Alternative 2 (II) would be a more acceptable alternative to the Department.

Fisheries

1. Our primary concerns are potential influences upon 1.) Gold Lake anglers (via visual and sound impacts) and upon 2.) water quality of Salt Creek and Gold Lake (via proposed development near Skyline Creek).
2. Visual impacts as seen from Gold Lake were apparently estimated by using the center of the lake as the viewpoint. We suggest that the entire lake serve as the Gold Lake viewpoint, since a popular boat fishery takes place over the entire lake surface.
3. The angling season extends from late May to November 1. Would the summer operating restrictions on north slope lifts cover this total period? If not, visual and sound impacts would be potential concerns to Gold Lake anglers. One objective in our current Gold Lake fish management draft plan is to encourage retention of the predominantly natural alpine setting.
4. Our records indicate that Skyline Creek is U.S.F.S. class II (supports trout) for most of its length. Map II on page 27b of the EIS draft and the text on page 27, Water Resources, depicts the entire stream as class III (no fish).
5. Roads, diesel fuel storage and other developments associated with the Skyline Creek drainage have potential to affect water quality and aquatic resources downstream, including those of Gold Lake. Development associated with ski lift D would be near the origins of this stream and appear to have the most potential to impact it (e.g. Table V-3 on page 47 of draft EIS).

Wildlife

1. If Summit Lodge is built, impacts to elk and deer (primarily elk) will be significant in the Saddle and immediate vicinity, regardless of the exact location of the lodge. Moving the site 200 to 300 feet northwest will do little to minimize the harassment factor on elk. Since the lodge and accompanying developments are designed to attract up to 426 people at one time (PA01) during the summer in Alternatives IV through VI, a significant reduction in elk use can be expected. We are concerned with increased recreational activity in Douglas Horsepasture and additional impacts on big game use of the area.

2. Production of forage for big game on north slope ski runs may be over emphasized, depending upon the plant species, soil types and steepness of the terrain.

The disturbance of the saddle and bench areas, which are reported as preferred forage sites for elk, and the disruption of a known travel route will probably cause the animals to leave this high use area. Elk forced to select a less favorable travel corridor and to feed in less suitable areas with steeper terrain, will have increased energy costs. This increased use of energy may not be compensated for by increased forage on the runs. An increased energy drain in spring and summer could cause reduced herd productivity. In addition, the removal of 110-240 acres of old growth habitat may include important summer thermal cover.

3. On page 51 of the DEIS it is stated that there would probably be some winter displacement of marten from the immediate activity area. The displacement will most probably be year-round since considerable summer recreational activity is proposed in some of the alternatives in addition to the loss of old growth forest (110 to 240 acres). It is also stated that marten displacement may be compensated for by a probable reduction in trapping effort. The 1983-84 Hunters & Trappers Fur Harvest Report shows a total of eleven marten taken in Lane County. It is doubtful that the very limited take of marten would have a noticeable affect on the overall population in the Willamette Pass area. Fur harvest of so few animals would consist of a minute portion of the annual increase, or surplus segment, of the population. The base, or breeding population would not be affected. Displacement of marten from effective habitat will have a very noticeable impact by reducing the base population and future production. The assumed reduction in trapping will not compensate for permanent losses from a reduced breeding population.

Also on page 51, the discussion on the fisher refers only to trapping mortality on the population. Since the fisher has had total protection in Oregon for a number of years, how would the assumed discouragement of trappers have any bearing on fisher? Though it might be a consideration, the incidental catch of fisher by marten trappers probably would not have a significant impact on the fisher population.

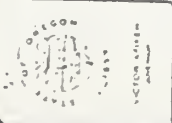
Ascribing a beneficial value to fisher from the ski area expansion appears to be an extremely inventional idea. Most of the literature generally describes preferred fisher habitat as large forested areas with limited disturbance such as back country and wilderness.

12 The loss of the ridgetop travelways to Summit Lodge and ski run development would have an impact on fisher as well as marten.

13 On page 48 and 49 the discussion of wolverine habitat infers that the Waldo area wilderness addition is in some way mitigative for possible losses of suitable habitat in the project area. This is totally inappropriate and should be deleted.

14 Alternatives IV through VI will increase the area classed Roded Natural (RN) in the Recreation Opportunity Spectrum (ROS) and extend the boundary to include Douglas Horse Pasture. The need for this class change is not evident in the text of the DEIS. We recommend excluding Douglas Horse Pasture which has high, seasonal big game use and is also important to other wildlife species. The RN boundary could be located at or below the 5,600 foot elevation contour to the southwest of Douglas Horse Pasture which would leave this wildlife area in the semi-primitive non-motorized class. The description of the Rural (Ru) class certainly fits the proposed development of the Saddle Area with construction of Summit Lodge and the ensuing increased activities. What rationale is used for not expanding the Ru class boundary to include this new area which will be "substantially modified from the natural" to "enhance specific activities"?

D4-4



Department of Fish and Wildlife

506 SW MILL STREET, P.O. BOX 3503, PORTLAND, OREGON 97208

March 12, 1945

Curtis Seide
2545 Jackson Street
Eugene, OR 97405

Dear Mr. Seide:

Thank you for taking the time to express your concerns about Gold Lake and your long-time interest in this unique resource.

This small perennial tributary to Gold Lake may have been inadvertently overlooked in preparing the water resources portion of the Draft FIS, Willamette Pass Ski Area. The omission has been brought to the attention of our local Fisheries Biologist, Jim Hutchison. He has informed us that a field investigation will be made at the earliest opportunity. At that time a determination can be made whether or not the proposed road in the Preferred Alternative might possibly impact the lake via the stream.

The Department has indicated to Willamette Forest that Alternative II's environmental consequences would be more acceptable than those of Alternatives III through VI.

Thank you again for your keen interest in Oregon's natural resources.

Sincerely,

Robert N. Juhber

Robert N. Juhber
Forest Policy Coordinator
Environmental Management Section

rjc
Attachment

cc: Robert Narstad w/Attachment
D. Lantz w/Attachment

Feb 15, 1955
Dear Sir:

After reading the draft Environmental Statement about the Willamette Pass Ski Area I feel I should write to you about something that is not mentioned in the statement. It doesn't show on the maps and maybe you do or don't know about it.

There is a stream running directly into Gold Lake on the east shore about halfway down the lake. It runs the year around. I know what I'm talking about because I have been going camping & fishing at Gold Lake for more than 20 years.

If the Ski area is allowed to expand on the north side of Eagle Peak & West Peak, any pollution or downed spillover could get into this

1. Refer to Response to Comments from Jeff Zakel, number 6.
2. Refer to response number 4 (below) concerning sound impacts during angling season.

Refer to Response to Comments from Waldo Wilderness Council, number 64 regarding visual impacts on Gold Lake.

Refer to Response to Comments from Waldo Wilderness Council, number 36 and Appendix G regarding erosion control to maintain water quality.

Refer to response number 6, following.
3. Refer to Response to Comments from Waldo Wilderness Council, number 64.
4. Yes, summer operating restrictions on the north slope would cover this time period. Generally the ski season runs mid/late November to late April.
5. A recent conversation with ODFW biologist, Jim Hutchison, indicates that although ODFW maps show Skyline Creek to be fish-bearing, documentation of actual fish observation appears lacking. On the basis of observations by our biologist, we agree that Skyline Creek is capable of supporting trout, at least as far upstream as the east end of Douglas Horse Pasture; however, as stated in the EIS (page 18), Skyline Creek is a Class II stream beginning at its confluence with Salt Creek and extending approximately one-half mile up toward Douglas Horse Pasture. The remaining one and three-quarters to two miles of Skyline Creek is identified as a Class III stream (Oakridge Ranger District Stream Class Inventory, 1974). The water resource map in the EIS (following page 18) has been modified to distinguish Class II and Class III portions of Skyline Creek.

Based on this input, a Forest Service biologist will field check Skyline Creek to determine if the classification should be modified for our records. (Field check will occur when access to Skyline Creek is feasible).
6. Our environmental analysis recognized the potential to affect water quality and sensitive aquatic resources downstream from the proposed expansion. The preferred alternative includes numerous mitigation measures designed to protect those important resources from contamination and other impacts. The mitigation measures are summarized below.

water and flow directly into Gold Lake.

North slope expansion would displace the wildlife. We seen this happen when Waldo Lake road was put in. We used to see deer all the time around the lake. Now we hardly see any deer.

We have seen a Wolverine on Gold Lake road a couple years ago. As far as I know, Gold Lake is one of a kind in Oregon. I sure wouldn't want anything to happen to it. That is why I strongly urge you to oppose any expansion on the north slope.

I would recommend that Alternative Plan H or H-B.

Yours truly
Erica L. Lewis

2545 Jackson St.
Eugene Oregon 97405

RESPONSE TO COMMENTS FROM OREGON DEPARTMENT OF FISH AND WILDLIFE
7/26/85, CONT.

- Catchline road will be built to minimum standards. The road is located 600 to 800 feet from Skyline Creek in relatively flat terrain. No diesel will be transported on the catchline road.

- Top drive generators are required for chairlifts D and E. The diesel needed to drive the generators will be stored in 10,000 gallon tanks located in the south slopes of Eagle and West Peaks - at least 0.75 mile from Skyline Creek. The following preventative measures, recommended by DEQ, will be required:

1. Constructing primary and secondary containment tanks.
2. Installing early warning and area-wide surveillance systems.
3. Monitoring for leaks.
4. Constructing soil berms near tank inlet.
5. Transporting diesel in late summer via south side access roads.
6. Following approved hazard spill contingency plan.

By focusing on prevention, we feel that the potential for diesel spills into Salt Creek, Sleepy Hollow Creek, Gold Lake Bog, or Skyline Creek have been reduced significantly (see Table IV-3). Sedimentation due to lift, run, and road construction is discussed in sections describing effects on soil and water resources. No increase in sedimentation is anticipated.

7. The Summit Lodge is designed to attract 426 PAOT in the winter (not summer). Substantial impact to big game use of the saddle-travelway is possible, especially if heavy summer use of the lodge and lift G should occur. We still note elk use of the south face of Eagle Peak at the current rate of development, and if human activity were kept to a minimum, the presence of a building might not preclude continued big game use. In order to mitigate potential impacts to deer and elk, the Summit Lodge will be closed to public use during the off-season. Alternative IV proposes to relocate the Pacific Crest Trail away from its present location adjacent to Skyline Creek and Douglas Horse Pasture. Consequently, we anticipate a reduction in summer recreational activity rather than an increase.

RESPONSE TO COMMENTS FROM OREGON DEPARTMENT OF FISH AND WILDLIFE
7/26/85, CONT.

8. Since forage under this north slope timber stand appears quite sparse, we feel that elk will utilize erosion control plantings, if they are first, successful, and second, composed of palatable species.

9. As noted above, elk currently utilize the artificial openings of the existing ski area. We cannot conclusively state that the additional activity of the proposed expansion will not result in a reduction of the current use levels, however, it seems likely that animals accustomed to a certain level of human activity might be able to adapt and take advantage of new openings which should produce additional spring and early summer forage.

We agree that construction of Lift E, its attendant ski runs, and the proposed access road from catchline to Summit Lodge would probably impact spring, early summer elk use of the heavily-used bench northeast of the Summit Lodge saddle. This is noted in the wildlife assessment (see Appendix C).

10. There will be no summer recreational use of the north side developments (Summit Lodge and chairlifts) by the public.

We cannot dispute the figures provided by the 1983-1984 Hunters and Trappers Fur Harvest Report. We would point out, however, that David Walp, a trapper described by ODFW as "reliable", reported to Brian Ferry of your Springfield Office ODFW that he had harvested 30 martens in 1981, 41 in 1980, 38 in 1979, 9 in 1978, and 25-30 per year between 1977 and 1970. (Ferry, Brian, Personal communication; Robart, Gregory P., Wolverine, Fisher, Marten Sightings in Oregon 1973-1982. Oregon Department of Fish and Wildlife, 1982). Most of these animals were taken within 6 miles of Willamette Pass. Since the boundaries of Lane, Deschutes, and Klamath Counties intersect within two miles of Willamette Pass, it is possible some marten harvested in the vicinity were reported from counties other than Lane. Our recreation personnel commonly report observations of marten sets throughout the Waldo-Willamette Pass backcountry. We feel that the take of marten may be higher than your records indicate.

Where reductions in base populations are concerned, we have a number of marten sightings from the vicinity of the campground and summer home developments north and west of Odell Lake, indicating some level of compatibility with human activities. We also refer to our Response to Comments from Waldo Wilderness Council regarding the propensity of martens to use natural and artificial openings, and the potential of improving marten den sites and prey base by leaving slash piles and cull logs near the edges of ski runs.

RESPONSE TO COMMENTS FROM OREGON DEPARTMENT OF FISH AND WILDLIFE
2/28/85, CONT.

11. Please refer to Response to Comments from Waldo Wilderness Council (response number 48). We agree that probably the best we could hope for would be a neutral impact on fisher as a result of expansion. This reference will be deleted.

12. We agree with this comment.

13. Please refer to Response to Comments from Waldo Wilderness Council (response number 46).

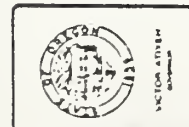
14. A factor which defined this roaded natural class boundary is proximity to the catchline road.

The location of the roaded natural boundary is not discretionary in reference to the occurrence of wildlife.

Recreation experiences in the expansion area, taken as a whole, will meet the recognized standards for roaded natural given the assumption that design requirements for the Summit Lodge, runs, and related facilities will be met.

RESPONSE TO COMMENTS FROM OREGON DEPARTMENT OF FISH AND WILDLIFE
3/12/85

1. Refer to Response to Comments from Curtis Seide.



Executive Department

155 COTTAGE STREET NE., SALEM, OREGON 97310

February 12, 1985

Michael A. Kerrick
Forest Supervisor
U. S. Forest Service, USDA
P.O. Box 10607
Eugene, OR 97440

SUBJECT: Willamette Pass Ski Area
OR850103-006-4

Thank you for submitting your draft Environmental Impact Statement for State of Oregon review and comment.

Your draft was referred to the appropriate state agencies for review. The Division of State Lands and the Department of Environmental Quality offered the enclosed comments, which should be addressed in preparation of the final Environmental Impact Statement.

We will expect to receive copies of the final statement as required by Council of Environmental Quality Guidelines.

Sincerely,

INTERGOVERNMENTAL RELATIONS DIVISION

Dolores Streeter /bm

Dolores Streeter
Clearinghouse Coordinator

DS:bm
Enclosure

cc: Frisch, Oakridge
Grady, SD

Received 2/11/85

Dick Grady

RG



OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
155 Cottage St NE Salem, Oregon
Phone: 378-3732 97310

P M P S C I A T F D F V I F H

Project #: OR 006-4

Return to: REB 02 1985

HOUSING REVIEW

THE REVIEW PROCESS IS DIFFERENT FOR THESE PROJECTS

- (a) Information from applications for assistance under the HUD housing program is forwarded to the Clearinghouse by HUD. Federal processing continues while review is being conducted.
- (b) Review comments should reflect consistency with plans and programs as well as environmental concerns.
- (c) Please notify us immediately if you are unable to respond by the return date. If no response is received it will be assumed that you have no comment and the file will be closed

PROGRAM

ENVIRONMENT

- () -----It has no significant effect.----- ()
- () -----Effects, although measurable, would be acceptable----- ()
- () -----It has no adverse effect----- ()
- () -----It has adverse effects.----- ()
(Explain in Remarks Section)
- () -----We are interested but require more information----- ()
(explain in remarks section)
- () -----Additional comments for project improvement.----- ()

REMARKS

The preferred Alternative II is any other development proposal that would add new parking capacity for 500 or more vehicles would need an Indirect Source Construction Permit from Lane Regional Air Pollution Authority.

Agency REB BY Howard M. Hester



OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
155 Cottage Street SE Salem, Oregon
Phone: 378-3732 97310

PROJECT NO. 006-4

FEB 28 1965

RETURN TO:

HOUSING REVIEW

THE REVIEW PROCESS IS DIFFERENT FOR THESE PROJECTS

- Information from applications for assistance under the HUD housing program is forwarded to the Clearinghouse by HUD. Federal processing continues while review is being conducted.
- Review comments should reflect consistency with plans and programs as well as environmental concerns.
- Please notify us immediately if you are unable to respond by the return date. If no response is received it will be assumed that you have no comment and the file will be closed.

PROGRAM

- () -----It has no significant effect.----- ()
() -----Effects, although measurable, would be acceptable----- ()
() -----It has no adverse effect----- ()
() -----It has adverse effects.----- ()
() -----We are interested but require more information----- ()
() -----(explain in remarks section)

t improvement.----- (X)
(See comments)

If the "Preferred Alternative" is selected, a minimum 100' buffer of riparian vegetation should be maintained on Skyline Creek, Sleepy Hollow Creek and adjacent wetlands to prevent excess turbidity and sedimentation during construction and maintenance.

RECEIVED
JAN 4 1965

DIVISION OF STATE LANDS

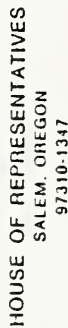
Wm. D. Davis

RESPONSES TO COMMENTS FROM STATE OF OREGON EXECUTIVE DEPARTMENT

- We agree with this comment.
- Under the preferred alternative, Sleepy Hollow Creek and adjacent wetlands will not be affected. A minimum distance of approximately 600 feet of buffer of riparian vegetation will be maintained on Skyline Creek.

Refer to response to comments from Waldo Wilderness Council, numbers 9, and Appendix G for additional information.

XRAY TO ADONIS 550906 AND
INVESTIGATION OF HYPERTENSION
SAVED ONE FROM 97110131.
170 West Street
Springfield, Oregon 97472



Willamette National Forest
P.O. Box 10607
Eugene, OR 97440

Attn: Michael A. Kerrick

Dear Michael,

Enclosed is my response relating to the Willamette Pass Alpine Winter Sports Site Draft Environmental Impact Statement.

Relating to this proposal, as the enclosed letter states, I am in support of Alternative IV. I have mailed the enclosed letter to local newspapers near my district. I am hoping they will print it as a guest editorial as this issue is of such vital economic importance to Lane County.

Please consider the enclosed letter as my comments to the EIS you sent to me in December 1984.

Thank you for your consideration of my comments.

Cordially,

Larry Kell
State Representative, Larry Kell
District 42

LII/nb Enclosure

3.1-85 CC sent outside
" " routed in 50
" " " "

RY HILL
NE COUNTY
DISTRICT 42



Y TO ADDRESS INDICATED
 Date of Representatives
 born Oregon 9/310 134/
 6 West K Street
 Englefield Oregon 9/677

HOUSE OF REPRESENTATIVES
SALEM, OREGON

97310-1347

February 27, 1985

Dear Editor:

A wonderful opportunity for new jobs lies among the sparkling snowfields of the Willamette Pass. A proposal to expand the Willamette Pass Alpine Winter Sports Area, Lane County's one and only ski area, is now before the U. S. Forest Service for final decision. The most likely version to be approved, labeled "Option 4," would create 129 new seasonal jobs and double the number of visitors to the ski area, while providing an estimated \$3.97 million annual economic boost to central Lane County.

"Option 4" has been recommended by the blue ribbon task force appointed by the USFS to analyze the proposed expansion. Made up of experts in environmental issues, recreation, forest management, and public planning, the team carefully studied expected economic, environmental and recreational impacts of the proposal.

If approved by the USFS, "Option 4" would involve expansion in several phases, each phase contingent on user demand. In phase I, a new triple ski lift would be added to the north side of Eagle peak. Phase II would include the addition of two new triple ski lifts to West Peak. The final phase of the plan would add a Summit Lodge on the "saddle" southeast of West Peak. The plan could have a time frame of ten years or more. Construction would cost \$5.35 million of private investment funds and generate \$10.70 million in secondary revenue.

The expansion would offer major benefits for skiers with more diversified outdoor activity available. For the first time, they could take advantage of the deeper snow and colder conditions of the north slopes of Eagle and West peaks, especially during low snowpack years and

late in the skiing season. Also, the main lodge's facilities and services would be expanded to serve a maximum of 4,500 people per day. A nordic cross-country ski center with 2.5 miles of improved cross-country trails would be added.

Once complete, this non-polluting industry would be a permanent economic asset to our area. The revenue gain to central Lane County is estimated to reach \$3,970,000 annually.

Environmental effects would be small if precautions recommended by the task force are followed. A minimum number of trees would be removed, to be replaced with grasses and forage. Deer and elk would continue to have use of the foliage in the area. Other animal populations such as the martin, the fisher, and the wolverine are not expected to be damaged. A nearby research area, Gold Lake bog, would be protected by keeping diesel fuel off the north slope of the peaks. The main lodge's newly-built sand filtration sewage plant would accommodate the expanded use. Noise from the lifts would be kept to a minimum, not exceeding federal standards for street noise in homes and hospitals.

Besides winter sports, the chairlifts on the south side to the Summit Lodge would be operated during the summer months to give visitors a breathtaking view of the Three Sisters and Waldo Wilderness areas to the north.

I urge you to visit Willamette Pass, take a lift to the summit and look over the proposed site. Write to the Willamette National Forest headquarters by March 4th and give them your opinion and observations. Your input will be useful to them in making their decision on whether or not to grant the permit for this project.

Expansion of Willamette Pass Alpine Winter Sports Area is a good idea, and has been carefully reviewed to address and resolve potential problems. "Option 4" will work. It will bring millions of dollars into our area and allow the wonderful experience of the Cascades to be shared with more people, while preserving the natural value of the forestlands which Oregonians are so proud of.

Sincerely,

Larry Hill
State Representative Larry Hill
District 42

LH/dh

RESPONSE TO COMMENTS FROM STATE REPRESENTATIVE LARRY HILL

1. Refer to Response to Comments from Waldo Wilderness Council, number 62.



UNIVERSITY OF OREGON

January 21, 1985

Mike Kerrick, Forest Supervisor
Williamette National Forest
P. O. Box 10607
Eugene, OR 97440

Dear Mike:

Thanks very much to you and your office for sending along the impact statement and the proposed expansion plan for Williamette Pass ski area.

I have reviewed the draft carefully, especially the view of Eagle's Peak, from our forest service cabin site in the Odell Lake west bay area.

I find no objections whatsoever to the proposed expansion and both from a cabin owner and recreational user I heartily endorse the plan. Although I am not an avid skier, I feel that the expansion will provide what we all hope for -- the ultimate use of national forest territory to the greatest number of people.

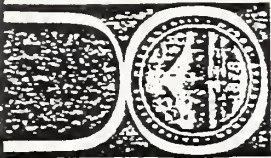
Sincerely yours,

How Ritchey
Norval J. Ritchey
Assistant Dean

NJR/dd

cc: Chuck Wilper

*1.22.85 CC sent under file
"noted 1/23/85"*



Forest Industries Management Center
Office of Director
College of Business Administration
UNIVERSITY OF OREGON
Eugene, Oregon 97403
503 686 4145

January 17, 1985

Michael A. Kerrick
Forest Supervisor
Williamette National Forest
211 East Seventh St.
P. O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick:

Upon examination of the Draft Environmental Statement of the Williamette Pass Ski Area, I would recommend that Alternative IV be adopted. This alternative, allowing for the development of two lifts on the north slopes of Eagle and West Peaks, appears to strike the best balance between the needs and desires of the downhill skiers on the one hand, and the desires of some wilderness groups on the other hand. The measures that are to be taken to minimize impact on nearby roadless areas, such as rerouting the Pacific Crest Trail, and restricting summer lift activities to the south slopes of Eagle Peak (where the current lifts are) should be adequate to preserve the wilderness experience for all those desiring it.

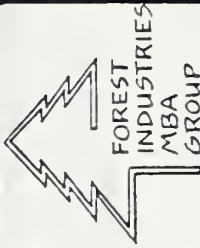
Sincerely,

Stuart U. Rich

Dr. Stuart U. Rich
Professor of Marketing and
Director, Forest Industries
Management Center

SUR:nev

*1-18-85 - CC sent under file
"noted 1/23/85"*



UNIVERSITY of OREGON
EUGENE, OREGON 97403

February 25, 1985

Michael A. Kerrick
Forest Supervisor
Willamette National Forest
2111 Seventh Street
P.O. Box 10607
Eugene, Oregon 97440

Dear Mr. Kerrick:

After reviewing and discussing the Willamette Pass Alpine Winter Sports Site Draft Environmental Impact Statement, the University of Oregon Forest Industries MBA Group agrees with the adoption of Preferred Alternative IV.

By developing the south and north slopes of Eagle and West Peaks and re-routing the Pacific Crest National Scenic Trail, this alternative will best service the demands of downhill skiers while retaining the primitive wilderness experience desired by other users of the area.

We would appreciate your forwarding of any future information regarding the progress of this matter. Thank you.

Sincerely,

Sherry Hutchinson
Sherry Hutchinson, Secretary
Forest Industries MBA Group

2-28-85 CC sent to Michael A. Kerrick
" " " " " "



January 9, 1985

Mike Kerrick
Willamette National Forest
PO Box 10607
Eugene OR 97440

Dear Mr. Kerrick:

The north slope ski facilities expansion request by Willamette Pass Ski Corporation is significant from an economic development standpoint and should be approved. Important considerations include:

1. the impact that Willamette Pass makes on the local and regional economy--expenditures by area residents for equipment, food, transportation services, etc., benefit many businesses;
2. the short-term construction employment and increased seasonal employment benefitting the metropolitan area job market; and
3. the contribution to overall tourism development and attraction in Lane County.

It is clear that a solid environmental balance in the location needs to be maintained and that aspect should not be overlooked. However, these concerns are being addressed by the developer. I firmly believe that Willamette Pass, as it continues to grow, will increasingly serve the winter recreational needs of skiers and families in Eugene and Springfield. Willamette Pass is an asset to our economic diversification efforts now in place.

We urge your support and cooperation in handling this request without delay.

Sincerely,

Brian Obie
Brian Obie
Mayor

BBO:MRS:pm/0028b

cc: Tim Wiper

1-15-85
CC sent to Michael A. Kerrick
" " " " " "



CITY OF OAKRIDGE

OAKRIDGE, OREGON 97463

782-2258

February 11, 1985

Mr. Michael A. Kerrick
Forest Supervisor
Willamette National Forest
P. O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick:

At its February 7, 1985 meeting the Oakridge City Council voted to endorse Alternative VI (Maximum Development) of the Draft EIS for the proposed Willamette Pass Ski Area expansion. The Council made it very clear that the development of the ski area has a direct positive economic impact upon Oakridge and that in light of the dire need for diversification and strengthening of the community's economic base; especially given the current state of the wood products industry, the loss of the Westfir mill, etc; the Council very strongly endorses the concept of maximum development of the Willamette Pass Ski Area. This endorsement of Alternative VI includes endorsement of its provision for a thorough study to be conducted prior to authorization for any on-site motel unit.

If there are any questions regarding the Council's action in this regard, please feel free to contact me.

Very truly yours,

Robert D. DeLong

Robert D. DeLong
City Administrator

RDD:ls

2-12-85 CC sent back to
"nailed in 50"



Florence • A Whale Of A Place



January 30, 1985

Willamette National Forest
P. O. Box 10607
Eugene, Oregon 97440

Gentlemen:

The Florence Area Chamber of Commerce Board of Directors is extending their unanimous support of the expansion program at Willamette Pass.

While we can sympathize with the wilderness people and other nature lovers we, here in Florence, are very familiar with developing recreational facilities and creating jobs.

The ski facility at Willamette Pass is the closest to our area which provides us with the opportunity to enjoy a day of skiing.

If we can be of further assistance to you, please call or write us.

Sincerely,

Rick Hamilton

Rick Hamilton, President
Florence Area Chamber of Commerce
RH/pf

2-1-85 CC sent back to
"nailed in 50"

Willamette National Forest Lane Council of Governments

NORTH PLAZA LEVEL 15B/125 EAST EIGHTH AVENUE EUGENE OREGON 97401 / TELEPHONE (503) 687-4283

March 5, 1985

Mr. Michael Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick:

Regarding the Environmental Impact Statement for Willamette National Pass Alpine Sports Site, the Lane Council of Governments' staff developed the following comments for the L-COG Board of Directors:

- 1 - The study discusses the effect on real estate values and demand for second homes by Eugene-Springfield residents but fails to address these issues for Oakridge and Westfir.
- 2 - In accordance with the City of Oakridge's Comprehensive Plan, expansion of the ski area would meet the goals in the Plan for furthering economic diversification by encouraging recreation development in surrounding forest lands.
- 3 - The study does not adequately cover the transportation problems resulting from maximum development under Alternative VI.
- 4 - It would have been helpful if unemployment data for the Oakridge and Westfir area were included in the study. While the EIS provides data on the number of jobs to be provided, it does not address the job types.
- 5 - If the area was a destination point for other activities, as well as skiing (conventions, fishing, hiking, etc.), this would further the Oakridge-Westfir tourism potential.
- 6 - The projected revenue from any "secondary economic benefits" would need to be offset by projected costs to communities in terms of needed or additional infrastructure improvement, personnel additions, and other capital improvements. While private enterprise might be expected to provide the major capital financing, local governments may need assistance in providing needed public improvements.

3-6-85
CC sent Oakridge
replied in 50

Willamette National Forest
March 5, 1985
Page Two

The L-COG Board approved the staff recommendations to support the decision of the Forest Service and to recommend Alternative IV with the following comments:

1. If Alternative IV-B is chosen, a thorough study should be completed prior to authorization for any on-site overnight accommodations. 7
2. Mitigative measure to alleviate environmental problems should be implemented, as described in the study. 8
3. Construction of access roads and the Summit Lodge should be completed in a way that blends with the natural environment. 9
4. Additional citizen input should be sought to acquire feedback on the design of the lodge and the location of the road. 10
5. Further study should be completed to determine the effect development will have on the possibility of further growth, real estate values, and housing in Oakridge and Westfir. 11

Sincerely,

JoAnn McCauley
JoAnn McCauley
Information Coordinator

cljmwrf

RESPONSE TO COMMENTS FROM LANE COUNCIL OF GOVERNMENTS

1. Although it is conceivable that a few skiers will purchase second homes in the Oakridge and Westfir area for weekends use, real estate values are not expected to increase (Bob Seaton, Oakridge Realty).
2. This information has been included in the FEIS on page 53.
3. See Response to Comments from Waldo Wilderness Council, number 68.
4. Unemployment figures for the Oakridge-Westfir area are estimated below, based on the 1980 census data.

	Employed Persons	Unemployed Persons	Unemployment Rank
1980	1380	310	18.3%
Nov. 1983	1362	325	19.3%

The unemployment rate for Lane County as of November 1983 was 10.7% (personal communication from City of Oakridge).

The Willamette Pass Ski Corporation employs workers for the following job types:

Winter Season	Off-season (spring, summer, fall)
Bartender	Bartender
Cashier	Cook
Clerk (retail sales)	Construction
Cocktail waitress	Information
Cook	Logging
Janitor	Maintenance
Lift operations	Waitress
Maintenance	
Parking attendant	
Rental shop technician	
Snow groomer	
Ticket checker	
Ticket sales	

5. Agreed

RESPONSE TO COMMENTS FROM LANE COUNCIL OF GOVERNMENTS, CONT.

6. The effects on the unincorporated community of Crescent Lake Junction are addressed in the FEIS on pages 52-55. Community plans are updated every 2 to 5 years to re-evaluate changes in the area as required by the state. No impacts are expected in community services under any alternative at this time.
7. Agreed. See proposed mitigation measure in section on Overnight Accommodations on page 55.
8. Agreed.
9. Agreed.
10. Access roads will be built prior to chairlift or summit lodge construction. Their location will depend on several factors including grade, soil types, difficulty of construction, effect on visual, and other resources. Public input is welcome. We plan to actively solicit public concerns and comments prior to the design and construction of the Summit Lodge. These issues and concerns will be incorporated into an environmental analysis which will address the proposed development.
11. See response to number 1 above.

SPRINGFIELD AREA CHAMBER OF COMMERCE
221 NORTH ASH STREET, P.O. BOX 155, SPRINGFIELD, OREGON 97132-0155



February 13, 1985

Mr. Mike Kerrick, Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, OR 97440

Mr. Kerrick:

The Springfield Area Chamber of Commerce supports the proposed expansion of the Willamette Pass Ski area.

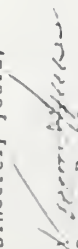
The expansion would have a highly beneficial impact on the economy of the area which is sorely needed.

This proposal is just the type our state needs to enhance both tourism and recreation.

The Chamber urges the favorable consideration of the United States Forest Service of this exciting development in an expeditious manner.

We do not want to see another Oregon project bogged down by delaying tactics of extremist environmental groups.

Sincerely yours,

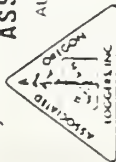

Donna Fugge
President

GATEWAY TO THE MCKENZIE RIVER

2 19 85 CC 2-13-85
Available 36

ASSOCIATED OREGON LOGGERS, INC.

AUTUMN HOUSE
1077 GATEWAY LOOP • P.O. BOX 846
SPRINGFIELD OREGON 97477
(503) 746 4311



March 7, 1985

Mr. Michael Kerrick
Forest Supervisor,
Willamette National Forest
PO Box 10607
Eugene, Oregon 97440

Dear Mike,

Thank you for the opportunity to comment upon the proposed Willamette Ski-Pass expansion plan. While our comments will be received after your deadline date of March 4, 1985, we are compelled to illustrate the importance of this recreational opportunity and public input process.

The object of this draft environmental impact statement (DEIS) is to discern the benefits (both recreationally and economically) and the impacts of the proposed development. I believe your efforts to produce an understandable DEIS have highlighted those benefits and impacts.

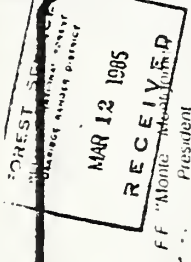
We support the proposed expansion plan for the following reasons:

- 1) It would allow the Willamette Pass ski area to become a much more competitive destination recreation area both in the summer and winter.
- 2) The increase in winter and summer related tourism and recreation activities would support and diversify local payrolls.
- 3) It would increase winter access to wilderness areas.
- 4) The proposed expansion plan would increase winter recreation opportunities for the Eugene/Springfield metropolitan area.

In the final EIS, the recreation and economic benefits should continue to be stressed and contribute to the overall project rationale. Moreover, the final EIS must, positively and logically emphasize your rationale for the preferred alternative. I am not sure that was in evidence in the DEIS.

Loggers Assurance Co (LACO) • AULiHo • THE LOG • AOLiHo • AOL Life & Health • AOL Radio

3-8-85 *Mike*
CC sent *Monte*
noted in S.D.



Mr. Michael Kerrick
Page 2

Those environmental impacts which appear to be in conflict with the plan need positive solutions. Your present analysis of the proposed expansion reflects this approach, but the final DEIS should continue with those efforts.

I hope this input strengthens our overall support for your preferred alternative.

Sincerely,

Monte

Gregory A. Miller
Forest Planner

cc: F.F. (Monte) Montgomery
GAM/sks

RESPONSE TO COMMENTS FROM ASSOCIATED OREGON LOGGERS, INC.

1. Willamette Pass Ski area is not designed to be a destination recreation area.

2-8 8-5
C. Gene Hand & Co.

NOT A STATE AGENCY • NOT EMPLOYEES •

February 7, 1985

Mr. Mike Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97440

Dear Mike,

I am writing to you to express my personal support for the proposed expansion of the Willamette Pass Ski Area, and to encourage you to approve and support the proposed plans submitted by the Wiper family.

As a fellow Rotarian, I know you are familiar with Chuck Wiper and his history of community involvement over many long years in this area. I am also well acquainted with Tim Wiper, through serving on the board of directors of another local business group. I have always known Chuck to maintain absolutely the highest standards of integrity and business practices, and am delighted to see that his son is following his father's lead and is fast emerging into one of the best young business leaders of our area. The Wiper family always has maintained a high level of community consciousness, putting back into the community many of the rewards they've derived from it, a characteristic that unfortunately is more an exception than the rule with many other local businessmen.

I mention this because I believe that it is important to establish the fact, amidst the complaints of many environmentalists that the expansion of the Willamette Pass Ski Area, past and proposed, is a scourge on our environment, that the Wiper's are not ones with a tendency to rape and pillage the countryside for the purpose of economic benefit. I believe that quite the contrary is true, evidenced by the huge cash (not leveraged) investment they have made and plan to make in the ski area.

I am not a skier, but I am a local businessman with a high regard for the livability and the economic viability of our state. The impact of an expanded Willamette Pass Ski Area on our economy should be quite obvious, and considering the Wiper family's history of quality in the endeavors with which they become involved, I, for one, believe that the advantages of an improved and expanded Willamette Pass are very consistent with all of our goals of improving this state's economic, sociological, recreational and environmental qualities.

C. GENE HAND
BUS 5031455 2460
RES 503-666 0189

PO BOX 1483 • EUGENE OREGON 97440

JAMES W. KORFHAGE
BUS 5031485 2460
RES 503-683 4970

Korfhage to Kerrick
February 7, 1985
Page Two

Frankly, it is my opinion that the environmental movement has gone too far in recent years in squelching viable projects in this state simply for the sake of maintaining wilderness acreage. The proposed 209 acre expansion of the Willamette Pass Ski Area is very well conceived. It is not a messy nor environmentally-damaging project. Rather, it is probably one of the best conceived usages of Oregon's natural areas that has ever come before your agency for consideration. In that regard, I highly recommend your and your agency's approval of the Wiper's plans.

Sincerely yours,


Jim Korfhage

RESPONSE TO COMMENTS FROM C. GENE HAND & CO., JAMES W. KOPFIAGE

1. Implementation of the Preferred Alternative will add approximately 700 acres to the existing permit area.



FUR TAKERS OF AMERICA



7-601 FOUR RD
BLANCHY, OR. 97412
REG. 2B, 17402

Michael H. Kerrick
Super Visor, Willamette National Forest
211 E. 7th Street, Box 1060/
Eugene, OR. 97440

Dear Mr. Kerrick,

I am writing you with regards to the Willamette Pass Alpine Sports Site draft EIS. I am the Oregon State Organizer for Fur Takers of America, and as such represent all organized trappers and forharvesters in the state of Oregon. I am a professional furharvester, and for a portion of the year run a snowmobile and snowshoe trapline in proximity to the Willamette Pass area.

I have been in touch with several of your personnel who were involved in the preparation of the EIS, and because I believe the draft contains many errors and omissions, I will limit my comments to several areas, which I believe will enforce this view. In addition, I will address only wildlife generally, and trappers specifically.

I believe the research with regards to trappers has been superficial at best. The EIS ones not address the Cougar, Bear, Bobcat, Fox or Coyote. When asked to explain this the preparing biologist stated he did not address these animals because they appeared more frequently than the wolverine, fisher and marten, and so would not be a matter of concern. I pointed out to him that Elk and Deer appeared more frequently than any other species with the possible exception of "snowbirds", to which there was no response. I believe that the impact of alternative 4 would weigh more heavily on these species than on those being so easily defended by other sources.

On page 51 of the EIS the statement is made, that "the primary detrimental effects on the fisher appear to be direct mortality by trapping. - It goes on to state that the fisher could actually benefit from expansion because the potential vandalism and trap disturbance by increased usage would discourage trappers. Now ludicrous. Elsewhere in the report it is stated that increased vandalism of summer homes is not to be expected. It seems inconsistent that vandals would attack the property of one individual and not the other. I would further point out that the last fisher season in Oregon was in 1936, and the statement by a federal employee that trappers in Oregon were directly responsible for fisher mortality borders on irresponsibility. I ask that it be retracted.

3-4-85 CC not bld by
3-4-85 CC mailed in 50



FUR TAKERS OF AMERICA



PH 50814
Joe Hobbart
Box 14117

With regard to the wolverine habitat being removed, my personal opinion is that while wolverine activity has been identified by a very reputable trapper (Dave Walp) that the original area is so small the wolverine would simply adjust his hunting route to avoid it. I am far more concerned with the impact the development would have on the bobcat, marten, cougar and deer which have a much more limited range than the wolverine. I am also concerned that if the so called submit though were allowed, that the corporation would certainly demand summer use which would disrupt the local Elk summer range.

SECRET

I could write a volume on items I personally find defective in the EIS, however I am representing Oregon Fur Takers, and will voice only their opposition to alternative 4. We would find Alternative two acceptable and alternative three marginally acceptable.

GIN Hobbart
Robert Hobbart
Box 7
Hazel, Oregon

Yours Truly
Bob Hobbart
Oregon State Organizer
Fur Takers of America

RESPONSE TO COMMENTS FROM FUR TAKERS OF AMERICA

1. See Response to Comments from Waldo Wilderness Council (response number 16).
2. See Response to Comments from Waldo Wilderness Council (response number 48).
3. We appreciate your information regarding wolverine habits. We agree that summer use of the Summit Lodge would likely disrupt the use of the saddle-travelway by big game. In order to mitigate these potential effects, the Summit Lodge will be closed to public use during the off-season.



DALE ZERULL, President
FRID A. ZERULL, JR., Secretary

ONE STOP — SEW SHOP

HOME FABRICS, INC.
125 Silver Lane
Eugene, Oregon 97404
(503) 689 6867

January 25, 1985

Mike Verrick, Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97440

Mr. Verrick:

As a local businessman and avid skier, I would like to add my support to the Willamette Pass Ski Corporations proposed expansion plan for the Willamette Pass ski area.

As a businessman, I feel the economic impact of an expanded ski area will be tremendous for years to come. It will be beneficial for the tourist industry which I think is more obvious. Not so obvious is the impact a great ski area one hour from Eugene will have in selling Eugene to the outside world, such as high technology companies. High tech. folks are looking for that "quality of life" they aren't getting in crowded urban areas of the U.S.A. Recruiting of quality personnel for the University of Oregon and other existing institutions should be easier to entice those who are after that "quality of life".

As a skier, my family and I have enjoyed skiing Willamette Pass. My boys would particularly enjoy ski racing, which I understand would be available with the expansion.

I do hope the forest service rules favorably toward this proposed expansion.

Sincerely, *Dale Zerull*
Dale Zerull

1-25-85
cc sent Raker
"Mounted in S."

RESPONSE TO COMMENTS FROM HOME FABRICS, DALE ZERULL

1. This information has been included in the FEIS on page 53.



EUGENE CHAPTER
Izaak Walton League of America, Inc.
DEFENDER OF SOIL, WOODS, WATERS, AIR AND WILDLIFE

March 3, 1965

Grill Creek National Forest
Federal Building
Eugene, Oregon

Attention: Richard Grace
Recreation Area
Supervisor's Office

To: DRAFT: Draft EIS
Grill Creek Pass Ski Area

On March 26th, in a regular membership meeting, and after nearly a month of debate in membership meetings and Board action, the Eugene Chapter of the Izaak Walton League of America, Inc. voted nearly unanimously (two dissenting) to recommend the action set out in the EIS noted above.

The Eugene Chapter, IWL, has nearly 400 members, and over 600 reside in the Eugene-Springfield metropolitan area. We are well acquainted with the issues and the area.

As a means of offering comment on the Draft EIS, I will summarize the prevailing arguments in our lengthy consideration of the Draft EIS.

We believe that the Draft EIS is poorly prepared, and that much remains to be known about the area in question. In particular, we found that the considerations relating to fish and wildlife were wanting in depth and detail. Further, we found that, for reasons incomprehensible to us, the opinions of the Oregon Department of Fish and Wildlife biologists in the area were apparently ignored or discounted. We refer specifically to the opinions of Jim Greer and Jim Hutchinson, wildlife and fish biologists. We find that they both believe that, based upon existing information, any expansion beyond Alternative Two would result in significant impacts upon fish and wildlife. We understand that they also believe that much is to be learned about the area.

Our members have extensive knowledge of the area, and based upon our observations, the impact on Gold Lake and Bog, upon small streams heading in the area, upon fisheries, and upon big game which inhabit the area, could be great. We do not believe that these issues are addressed adequately in the EIS. For example, we know that elk use the area north of the pass in spring, summer, and fall. Their use of the area is determined by the presence or absence of snow. We also know

Helping to Build and Preserve a finer Outdoor America for All

from research done elsewhere (Montana) that human activity, and the results of human activity, such as roads, logging, or intensive recreational use, disrupt normal elk behavior and habits. We believe that the area north of the pass is important elk habitat, habitat that we cannot afford to lose. In our view, the area is already over-developed with the existing ski area and the access to Waldo Lake, and we want the existing vegetation and terrain left as is as a buffer for this important habitat.

Many of our concerns center on habitat. We are in the process of questioning big game biologists in all the western states regarding their major management concerns. All of the returns we have thus far (6) indicate that the greatest threat to elk and mule deer is the loss of habitat. We cannot afford the loss of habitat that would result from expansion of the ski area beyond Alternative Two.

We have largely destroyed our native fisheries by, among other prime causes, ruining habitat. The Courts, as we are sure you are aware, have held that, in the Hapleton area, insufficient attention has been paid to the preservation of fish habitat. Here, at the upper reaches of a major watershed, development is proposed that could result in siltation, pollution, a raising of water temperatures, and other detrimental consequences. We are opposed to this. Any development beyond Alternative Two results in a loss of habitat unacceptable to us and inadequately addressed in the EIS.

Our other concerns are related to the proximity of this proposed development to Gold Lake and Bog, and to the recently formed Waldo Wilderness Area. We believe that the EIS inadequately addresses the impact of the proposed development on the following:

- the view from Gold Lake;
- the biological integrity of the Gold Bog Area;
- the view from within the wilderness;
- the loss of a potential addition to the Waldo Wilderness Area.

The Eugene Chapter of the IWL is not a special interest group. We count among our members many who make their living in the forests and mills, and in the leisure industry. We are interested in economic development. But we oppose any development beyond Alternative Two as unacceptable for reasons which are inadequately addressed in the EIS.

We urge that the EIS be found unacceptable. We urge that this development be seen in the context of the plan for the entire forest, where questions regarding habitat and other conservation issues can be comprehensively addressed. In this EIS, we are looking at a small area only, an area in which, for example, the migration of elk cannot be seen or understood. Certainly your EIS does not adequately address

this issue.

We favor Alternative Two, and find the EIS unacceptable.

Jim Greer

Ter Giesen, President
Furune Chapter
Isaak Walton League of America, Inc.

RESPONSE TO COMMENTS FROM IZAAK WALTON LEAGUE OF AMERICA, INC.

1. We cannot agree that input from Oregon Department of Fish and Wildlife was either ignored or discounted. To the contrary, Jim Greer reviewed the wildlife assessment and served as a member of the risk analysis team for the wolverine under a formal agreement of cooperation. At the conclusion of the risk analysis process, Jim Greer and our biologist were in basic agreement that although some impacts were likely to big game and furbearers, Alternative IV still appeared acceptable. As far as fisheries are concerned, the year long scoping effort (Oct-1983 to Sept 1984) at the beginning of the planning process did not identify fisheries as a major concern. Further, the subject of concern for fisheries habitat did not arise as a major issue in any of the public meetings or workshops held during the planning process. Recently, the Department of Fish and Wildlife pointed out that our classification of Skyline Creek may be in error, and we are responding to their input. Other factors of possible significance to fisheries such as erosion or diesel spills are addressed in other sections of the FEIS on pages 32 and 33.
2. For fisheries discussion see Affected Environment and Environmental Consequences, Fisheries section pages 20 and 41.
- 3., 4. We agree with your concern for loss of big game habitat. We have also documented areas of importance to big game in and near the expansion area (see the Wildlife Assessment, Appendix C); evaluated potential impacts and attempted to suggest mitigation measures (See pages 9, 11, 13, and 40).
5. We do not agree that there is significant potential for fisheries damage either in the project area or to the watershed as a whole. Issues regarding siltation and pollution are addressed at length in other responses. (See Waldo Wilderness Council responses). There is no opportunity for raising water temperatures because no live streams exist in the expansion area. No other detrimental consequences are anticipated.
6. Refer to Response to Comments from Waldo Wilderness Council, number 64 regarding the view from Gold Lake.

Refer to Response to Comments from Oregon Department of Fish and Wildlife, number 6, pertaining to water quality.

Refer to Response to Comments from Waldo Wilderness Council, number 28, 65, 66 and 67 pertaining to visuals.

RESPONSE TO COMMENTS FROM IZAAK WALTON LEAGUE OF AMERICA, INC. CONT.

7. Refer to Response to Comments from Jeff Zakel, number 1. The EIS is intended to be site specific and consequently looks at a small area.

February 28, 1985
Mazamas
909 N.W. 19th Ave
Portland, Ore., 97209

Mr. Michael A. Kerrick, Forest Supervisor
Willamette National Forest
211 East Seventh Street
P.O. Box 10607
Eugene, Oregon 97440

Re: Willamette Pass Alpine Winter
Sports Site Draft EIS

Dear Mr. Kerrick:

Based on our review, we currently favor expansion Alternative 111 (one Northside lift) over Alternative 1V (our second choice-two northside lifts) for the following reasons:

1. It increases Skiers at One Time by 77% using up only 31% more acres (from 400 to 525 acres) while Alternative 1V increases Skiers at One Time by 116% but utilizes 175% more acres (from 400 to 1100 acres).
2. The intrusion of 3.5 additional miles of internal roads is avoided under Alternative 111.

We are particularly concerned by the provision for on site overnight accommodations provided in Alternatives 1VB, V and VI. As you may know, this was a key issue when the present Mt. Hood Meadows ski development was approved in the 1960's. We think that almost everyone, in retrospect, agrees that keeping the Mt. Hood Meadows ski area free from overnight accommodations has been a very good thing. We believe that no such accommodations should be incorporated in any plan for expansion of the Willamette Pass ski area. Let's continue Oregon's policy of not putting destination resorts in the middle of primitive areas. Once you start to put in overnight accommodations, the demand for expansion of lodgings, restaurants, shops, sever plants, etc. is never ending, with a consequent constant degradation of the fragile alpine environment.

We have one additional comment: Why is the annual return to the U.S. Treasury so low? Preferred Alternative 1V estimates an annual return of only \$41,930, or less than 50 cents per projected skier visit. We suggest that you should get more than the 2.5% projected on concession area sales. Thank you for providing the draft EIS for our review.

Very truly yours,

W.R. Gibson
W.R. Bus Gibson, Chairman
Conservation Committee
3-4-85
sent to Public
noted in SO

RESPONSE TO COMMENTS FROM MAZAMAS

1. At this time, there is no intent to provide overnight accommodations.
 2. Willamette Pass Ski Area is not designed to be a destination resort.
 3. The special use permit fees for the Willamette Pass Ski Area as well as most resorts occupying National Forest System Lands are based on a percentage of the gross fixed assets and sales. The fees are calculated using a set formula called the Graduated Rate Fee System which was adapted by the U.S. Department of Agriculture over ten years ago.
- The USDA Forest Service is currently re-examing fee determinations for all types of special use permits including ski areas, powerlines, radio antennas, etc. Fees for special use permits on National Forest System Lands may change in the future.

The Many Rivers Group of the Sierra Club
P.O. Box 3643, Eugene OR 97403

March 1, 1985

Mr. Michael A. Kerrick
Supervisor, Willamette National Forest
P.O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick,

The Many Rivers Group of the Sierra Club has made a substantial effort to develop a consensus position on the proposed expansion of the Willamette Pass Ski Area. The issues involved have been discussed at several of the group's Executive Committee meetings and at our general membership potluck. Our members have responded by letter and telephone to a request in our newsletter for advice on the matter. Group members have skied through the area with the EIS in hand to better understand the lay of the land.

The group values the roadless character of the area north of Eagle Peak. Many of our members are cross country skiers who enjoy the present natural character of the area. Unnecessarily destroying that character would be to waste a rare and valuable resource. Many of our members are also downhill skiers who enjoy the facilities at Willamette Pass. We recognize the desirability of providing skiers in Lane County with good local facilities. The information in the EIS indicates that we have an opportunity at Willamette Pass to have our cake and eat it too for the next fifteen years or more. We can provide all the downhill skiing facilities that the public can be projected to need and support without expanding into the roadless area.

Alternatives IV and V include components that will have a negative impact on the roadless area and will not be economically justified until well past the year 2000. Please see the attached memo and table prepared by Tim Odell for an economic analysis. The EIS does not explicitly state what time frame this plan is expected to address. No attempt is made to project skier demand beyond the year 2000, and it is questionable as to whether projections that far into the future could be accurate enough to be of value. Expansion plans of this magnitude should not be approved, even in principal, so far in advance of a demonstrated need.

It appears that the primary market for Willamette Pass will continue to be Eugene/Springfield, presently the source of 80.4% of the area's skiers. Even with improved facilities the area is not likely to attract skiers from Portland or from other states. The area will not seriously compete with Bachelor, even for local skiers on weekend trips. The "method 1f" projections in the EIS assume that adding two lifts on West Peak and a north side lift on Eagle Peak will

1

3-4-85cc Sent to Kerrick
1" mailed in SD

Increase Willamette Pass's market share by 60%. Even given that major change the market is not projected as being able to support those new lifts until the year 2000 or beyond.

It is arguable that north side skiing would attract a new group of skiers, and that the better snow on the north slopes would help see the ski area through bad snow years. Alternative III is the most acceptable of those offering north side skiing. It provides most of the benefits of alternatives IV and V, with a minimum negative impact on the roadless area north of Eagle Peak. Alternative III eliminates the need for the catchline road, which minimizes the impact on the roadless area while allowing full development of ski runs on the north slope of Eagle Peak. According to the EIS alternative III will reduce the semi-primitive class land by 133 acres, and rural class by 3 acres. In contrast Alternative IV would reduce the primitive class by 1,012 acres, and the semi-primitive by 406 acres.

If Alternative III is to become the master plan, however, it is clear that expansion to the north side of Eagle Peak will not be economically justified for many years. Using the Method II projections, which assume that every year will be a good snow year, and that the addition of a north side lift will increase the market share by 20%, the market cannot be projected to support Alternative III until sometime after the year 2000.

In creating Alternative IV the Forest Service has made many significant improvements over Alternative V as proposed by the Willamette Pass Ski corporation. The lifts have been cleverly sited to make them as inconspicuous as possible. In particular the substitution of lift "G" for proposed lift "f" has many advantages. Lift "G" would minimize the visual impact on Gold Lake and elsewhere in the Waldo basin, and would not create the erosion problems posed by the steep rocky slopes at the site for "f".

In addition lift "G" would begin in the vicinity of the current lodge, so that skiers on West Peak would have easy access to the lodge. The summit lodge proposed in alternatives IV and V will have a significant negative impact on the character of the area, and is completely unnecessary. The problems of dealing with sewage, transporting supplies, and the visual impact of the summit lodge all lead to the conclusion that it does not belong in the plan. An excellent lodge exists, which can serve the needs of any of the alternatives.

The figures in the EIS indicate, however, that Alternatives IV and V are grossly out of proportion to the demand for skiing facilities. Although the EIS calls the Method II projections "extremely conservative", they actually appear to be inflated. They do not make any allowance for bad snow years, which the EIS predicts for three out of ten years. The figures start with the 83/84 season, a year of

2

6

outstanding snow conditions, and project up from there. They also project that the two north side lifts and the proposed lift on the south side of West Peak in Alternatives IV and V would increase skier visits by 60%, although one wonders where these skiers would come from. The method II, "high" figures also use the Lane County Council of Governments population projections, which are inflated and actually overestimate the present population in Lane County. Yet even these inflated projections show that skier demand will not be enough to support Alternatives II-V until the year 2000 or beyond.

7


If we are to gamble on the allure of north side skiing, Alternative III would have the least impact on the surrounding area, and would provide more facilities than the market will support until some time in the 21st century. The financial stability of such a plan must be questioned, given the projections in the EIS. A bankruptcy caused by over-expansion would cost the public dearly; we would lose the use of the skiing facilities, the income a less ambitious plan would generate, and an irreplaceable defacto wilderness area would be lost to no purpose.

8

The economic analysis shows that even if Alternative III or IV is adopted as a master plan actual expansion should not be approved for many years, since the market cannot support it. This calls into serious question the process being used to create the plan. The Willamette Pass Expansion Plan is being rushed to completion even though a process of developing a comprehensive plan for the entire area is under way. The use of the surrounding land is a factor that is not being addressed in the current process, yet the projections indicate that even full implementation of Alternative I may be ill advised over the next few years. The break even analysis clearly indicates that there is no reason to rush this plan through the system.

9

In summary, the economic analysis of the break even point at Willamette Pass indicates that any further expansion there will be a financially risky business. The figures in the EIS indicate that both Alternative II and Alternative III contain more ski facilities than the public will be able to support until sometime after the year 2000. Choosing Alternative II over Alternative III would preserve the roadless area north of Eagle Peak while providing all the ski facilities the public can use over the time period addressed by the EIS. The roadless area north of Eagle Peak is an irreplaceable resource. It should not be sacrificed for a project which can not be economically justified now, and whose time will not come for another twenty years.


Tim Odell
Treasurer, Many Rivers Group of the Sierra Club

Tim Odell
750 W. Broadway, Eugene, OR 97402
(503) 343-5539

2/25/85
Memo Re: Willamette Pass Break Even Analysis

The Forest Service's Draft Environmental Impact Statement regarding expansion plans at Willamette Pass contains some valuable information regarding the economic break even points of the various alternatives, and makes projections as to when skier demand will be able to support expansion. This information is spread through several sections, appendices, and numerous tables. The results are not adequately summarized or presented. Nowhere is it pointed out that the best figures available indicate that none of the expansion alternatives is economically viable.

This memo and the attached table summarize the data presented in the EIS and presents the basic information needed to understand the figures generated by the EIS.

The economic break even point is defined in the EIS on page 112 as "The volume of skier visits per season required to meet all operating and cash expenses, including the cost of capital."

The EIS presents four different projections for the number of skier visits at Willamette Pass through the year 2000. The projections using Method I assume that skier visits will increase in direct proportion to the population increase, and that additional facilities will not automatically attract new skiers.

The only difference in the formula used to obtain the high and low figures using method I is that a different "site multiplier" was used to project the percentage of the skiing population that would use Willamette Pass rather than Hoodoo or Bachelor. The "low" projection uses a "site multiplier" based on a survey of Eugene, Willamette Pass's primary market, and predicted the 1983/84 season fairly accurately. The "high" Method I figures use a "site multiplier" based upon a survey taken at the ski area. The "high" figures would predict a 1985 total of 124,897: roughly double current expectations. The "high" figures are grossly inflated and should not be considered in a serious analysis of the economics of expanding Willamette Pass.

The projections using Method II are based on the 83-84 season. (Which had better than average snow.) Method I assumes that the same percentage of the Lane County

Population that skied at Willamette Pass in the 83-84 season will ski there in future years. Method II also assumes that each new lift which opens up new terrain will result in a 20% increase in skier visits beyond those expected as a result of population increase. Method II also factors in a 10% increase for each new lift serving existing ski trails. The low estimates using Method II are based on Portland State University population projections, and the high estimates are based on Lane Council of Government projections.

One of the assumptions of both the method I and II projections is that snow conditions will be fair to good. (EIS, page 108) In fact the Method II projections are based on the 83/84 year, which was much better than average. The EIS states on page 26 that Willamette Pass can expect poor snow three years out of ten. The projections must be discounted substantially if they are to represent accurate projections of average skier visits, in bad snow years as well as good.

The bottom line is that these projections show that the market will not support any of the expansion alternatives.

WILLAMETTE PASS SKI AREA EXPANSION
SUMMARY OF PROJECTED SKIER VISITS AND VISITS NEEDED TO BREAK EVEN
SOURCE: DRAFT ENVIRONMENTAL IMPACT STATEMENT, U.S. FOREST SERVICE

ALTERNATIVE I					ALTERNATIVE II					ALTERNATIVE III					ALTERNATIVE IV					ALTERNATIVE V				
Visits To Break Even					Visits To Break Even					Visits To Break Even					Visits To Break Even					Visits To Break Even				
1985	1990	1995	2000	Method I Low	1985	1990	1995	2000	Method I Low	1985	1990	1995	2000	Method I Low	1985	1990	1995	2000	Method I Low	1985	1990	1995	2000	Method I Low
78,050	78,050	78,050	78,050	75,409	93,230	93,230	93,230	93,230	75,409	93,230	93,230	93,230	93,230	75,409	116,110	116,110	116,110	116,110	75,409	120,090	120,090	120,090	120,090	75,409
				81,594					81,594					81,594					81,594					81,594
				87,440					87,440					87,440					87,440					87,440
				92,965					92,965					92,965					92,965					92,965
Projected Visits Method I High					Projected Visits Method I High					Projected Visits Method I High					Projected Visits Method I High					Projected Visits Method I High				
				124,897					124,897					124,897					124,897					124,897
				135,140					135,140					135,140					135,140					135,140
				144,823					144,823					144,823					144,823					144,823
				153,973					153,973					153,973					153,973					153,973
Projected Visits Method II Low					Projected Visits Method II Low					Projected Visits Method II Low					Projected Visits Method II Low					Projected Visits Method II Low				
				50,890					50,890					50,890					50,890					50,890
				55,070					60,580					66,080					88,110					93,620
				59,010					64,910					70,810					94,440					100,320
				69,010					69,010					75,290					100,380					106,660
Projected Visits Method II High					Projected Visits Method II High					Projected Visits Method II High					Projected Visits Method II High					Projected Visits Method II High				
				54,840					54,840					54,840					54,840					54,840
				60,560					66,620					72,680					96,900					102,960
				66,120					72,730					79,340					105,790					112,400
				71,150					78,270					85,380					113,840					120,960

RESPONSE TO COMMENTS FROM SIERRA CLUB: MANY RIVERS GROUP

1. The master plan proposes facility development to cover ten (up to fifteen) years from 1985-2000. This information has been stated explicitly in the section on purpose and need (see page 1). We appreciate your example table which more clearly displays the break even calculation and demand projections. An updated Table (IV-19) is included in the FEIS on page 60b.
2. Agreed. The primary market for the Willamette Pass Ski Area is Eugene/Springfield. The Method II projections have been recalculated based on actual skier preferences determined for February 1984 and February 1985. The calculations indicate that Willamette Pass Ski Area receives an average of 65% of the skier visits in Lane County; Hoodoo receives 15% and Bachelor 8% of the remaining skier visits in Lane County.
3. The assumptions used to calculate the original Method II projections included in the DEIS (such as a sustained 20% increase in skier visits due to the addition of a new lift) could not be substantiated. Although the number of skier visits would probably increase as new lifts are added, the actual percent increase would depend on several variables: size of ski area; mix of existing beginner, intermediate and advanced runs; marketing, etc. The percent change in skier visits would also be likely to change over time.
The Method II projections have been recalculated as described in response number 2 above (see Appendix D).
4. The details associated with the economic feasibility, public need, design and construction, etc. of the Summit Lodge will be addressed in a separate environmental analysis.
5. The demand calculations assure that snow conditions will be fair to good. We acknowledge in Appendix D that poor snow years will effect use at Willamette Pass. During poor snow years, several options are available to the permittee as outlined on page 42 and in response number 110 to the Waldo Wilderness Council.
The 1983-84 winter season is the first season to reflect the level of development described under the No Change - Phase I Only Alternative. Both the Summit (A) and Twilight (B) chair lifts were in operation at that time.
The fact that the 1983-84 represented a good snow year is coincidental.
6. The projections are based solely on population statistics taken from Portland State University, Center for Population Research and Census. The comparison of projected skier visits needed to break even to skier visits based on demand is shown in Table

RESPONSE TO COMMENTS FROM SIERRA CLUB: MANY RIVERS GROUP, CONT.

- IV-19. Note that Alternative IV breaks even in 1985-2000 using demand projections calculated using Method I (high) and Method II. The demand projections indicate the desire for people in Lane County to ski at Willamette Pass Ski Area and are not meant to predict actual use.
7. Prior to construction the permittee is required to demonstrate evidence of cash or assets to finance development and operation of the permit area. If the permittee experiences economic difficulties, it is unlikely that public service will be affected (based on our experience with similar sized ski resorts in Oregon and Washington). In the case of bankruptcy, the special use permit requires removal of all structures and improvements as described in response number 116 to the Waldo Wilderness Council.
8. Approval of actual development will depend on market need as demonstrated by the Willamette Pass Ski Corporation. See response number 24 to Waldo Wilderness Council.
9. See section on Break-Even Analysis on page 60 and comments from Willamette Pass Ski Corporation.



MARYS PEAK GROUP, SIERRA CLUB
P.O. BOX 863
CORVALLIS, OREGON 97330

March 1, 1985

RE: Draft EIS--Willamette
Pass Ski Area

Mr. Michael A. Kerrick, Forest Supervisor
Willamette National Forest
211 East Seventh Street
P. O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick:

The Marys Peak Group, Sierra Club appreciates the opportunity to comment on the Draft Environmental Impact Statement for the Willamette Pass Alpine Winter Sports Site Special Use Permit. The Group, representing over 500 members, is a division of the Oregon Chapter of the Sierra Club with more than 6,000 members, many of whom are both alpine and cross-country skiers and many of whom are also familiar with the site. We strongly favor Alternative 1, which continues the management of the present facilities with no change.

Our reasons for this recommendation center on potential impacts on the visual resources of the north side of Eagle Peak, the impact of project clearance and roads on Skyline Creek which drains into the Gold Lake Bog Research Natural Area, potential water quality impacts on Rosary Lakes and Gold Lake, and economics which potentially threaten the currently viable ski development. Our assumptions are based on the U.S. Service statutes which stipulate the need to offer public recreational opportunities and to protect the resource base.

Visual Impacts

Alternatives III, IV, V, and VI would require increasingly extensive clearing of ski runs, lift lines, tower pads, terminal pads, summit lodge, saddle lodge, and access roads amounting to between 115 to 150 acres. The area cleared would be a substantial fraction of the existing unaltered closed-canopy forest, perhaps impacting 25 percent of the site, most of which is presently placed in a semiprimitive non-motorized recreation opportunity spectrum. One need only to view other ski areas in the summer in Oregon to picture this impact; e.g., Multnomah, Hoodoo (although also affected by the 1963 burn), and Willamette Pass itself. We judge this impact to be a major visual impact as viewed from openings along the Pacific Crest National Scenic Trail, Maiden Peak, Mt. Fuji, Mt. Ray, and by recreationists

3-5-85 CC Sent to Oakridge
"Revised in 50"

Mr. Kerrick
March 1, 1985
Page 2

that use the upper portion of Gold Lake. We further believe that use of the area as a base for dispersed recreation in the summer will be deterred by the visual qualities of the area. This has been true for almost every other developed ski area. Computerized visual impact analysis does not adequately treat sensitive aspects of visual resources as perceived by dispersed recreationists. The DEIS is especially deficient in not displaying the visual impacts in a complete manner.

Gold Lake Bog RNA

As the only established federal RNA representing a montane mire in the Oregon Cascade Range, Gold Lake Bog is an important resource. Research work conducted by Seyer (1979) established that this, and other similar Cascade mires, are best regarded as moderately rich fens. Unlike classic bogs, they depend on the quality of incoming water for their biological characteristics. Drainages into the RNA are from Salt Cr., "Pothole Mdw. Cr.", and Skyline Cr. The DEIS gives no estimate as to sediment load associated with clearance and roads. Furthermore, changes in water quality, with respect to sewage disposal related to visitor facilities at both the summit and saddle lodges, are not addressed. These potential impacts must be evaluated to assure that the RNA is not adversely affected by the development on the north side.

Impact on Lakes

Gold Lake and Rosary Lakes are popular summer dispersed recreation opportunity sites. They are very close to Highway 58 and are both accessed by trail (including by the Pacific Crest National Scenic Trail for Rosary Lakes). The quality of the dispersed recreation opportunity offered by these two attractive family recreation destinations, in our opinion, will be diminished by the northside developments. What little feeling of isolation, solitude, challenge, and satisfaction in reaching and using these sites, will be affected by the visual intrusion of the developments, including the summit lodge and saddle lodge. Not in the short run, but possibly in a decade or more, there could increased water pollution which would be detrimental to visitor health. No discussion of these site specific impacts appears in the DEIS, nor are these impacts mitigated.

Economics

Our membership is extremely concerned that there continue to be an alpine ski facility at Willamette Pass and therefore we scrutinized with care the economic justification for this project. Our fears are, that should the project be economically unstable, the facility would be unable to remain open and the satisfactory opportunity now existing for downhill skiing at the site would be lost. Furthermore, the ability of the Forest Service to maintain control on the Special Use Permit in order to assure environmental protection of the site and the external impacts of the site, will be diminished if the permittee is on shaky financial ground. Questions as to whether the sizeable environmental impacts associated with the project alternatives are worth the financial risk of the project also have to be addressed, even though the permittee is a private party. We find the economic analysis presented in the DEIS to be inadequate and to mislead the reader to the expectation that Alternatives II-VI are economically feasible.

It is well-known in the state and is also indicated in the DEIS that snow conditions are marginal at Willamette Pass. "Three out of ten years may experience insufficient or marginal snow conditions at the base area during the critical Christmas holiday season" (DEIS p. 26). Given the marginal snow conditions at the site, it came as a surprise to us and appears to be a real deficiency in the DEIS, that data was not presented to show actual snow conditions in the project area to the north. No analytical comparison of snow conditions is given between north and south side at actual elevations and over a series of seasons so as to evaluate the risk of the development. The fact that the Willamette Pass Ski Corporation has entertained a snow making program and has now found it to be economically infeasible, suggests the marginal quality of snow at the site.

Even under marginally better snow conditions that may prevail on the north side, to get to their parked cars, visitors will have to traverse from the northside to the south on the east or west slopes, hardly an attractive prospect under marginal snow conditions. Alternatively, visitors will need to use the lift to go over the mountain back to their vehicles. We find the logistics of the use of the development under Alternatives III-VI to be inadequately addressed in the DEIS and to cause alarm as to the economics of the projects.

Mr. Tim Odell of the Many Rivers Chapter, Sierra Club prepared a memorandum on "Willamette Pass Break Even Analysis" which is attached, as Appendix 1, to this comment. Some of the main points of this memorandum are: 1) the DEIS fails to adequately summarize and present the data for adequate analysis; 2) the projections are based on better-than-average snow years; 3) the projections are based on a survey of users at site rather than potential users in the target area (Lane County); and 4) site multipliers are based on high values. The conclusion is that "none of the expansion alternatives is economically viable".

Conclusion

Alternative II does not expand the present project area. Our concern with this alternative rests on its potential for causing financial instability on the part of the permittee.

Alternatives III-VI increasingly impact the northside of Eagle Mtn. and are increasingly financially unstable ventures. We strongly recommend against these alternatives based on the material provided in the DEIS.

We recommend Alternative I, continuing the present facility.

Sincerely,

William E. Gilbert
William E. Gilbert
Chair

REF/WEF

Encls.

RESPONSE TO COMMENTS FROM SIERRA CLUB: MARYS PEAK GROUP

1. Refer to Response to Comments from Waldo Wilderness Council, number 67.

There is only one lodge being considered and it is the Summit Lodge. The proposed lodge would be located on the saddle between Eagle and West Peaks. The Summit Lodge would not be visible from any of the view points mentioned, if designed properly.

The fire on Woodoo was in August/September, 1967. This fire was known as the AlrStrip Fire.

The portion of the proposed development that would be visible from the PCNST (relocated section) consists of a small section of the area surrounding D lift.

The portion of the proposed development that would be visible from the PCNST will be seen only briefly. Consequently, significant visual impact on users of the PCNST in this area is not expected.
2. Refer to Response to Comments from Waldo Wilderness Council, number 36 and Appendix G regarding sediment loading and erosion control.

There is no proposed saddle lodge. The proposed lodge is the Summit Lodge. See Response to Comments from Waldo Wilderness Council, number 38 regarding proposed Summit Lodge.

Any sewage disposal system used must be approved by the DEQ and/or County Health Department. This will assure that all state water quality requirements are met.
3. The proposed addition (all alternatives) would not be visible from the Rosary Lake area. From Gold Lake if the F lift and the runs it service were developed then the upper 30% of these facilities would be visible. The selected alternative, IV, does not include any development visible from Gold Lake. There is only one lodge being considered for development and that is the Summit Lodge and it will not be visible from either Gold Lake or Rosary Lake.

See Response to Comments from United States Environmental Protection Agency, number 4.
4. See response number 7 to Sierra Club, Marys Peaks Group and number 116 to Waldo Wilderness Council. No major adverse environmental effects will result from implementation of the preferred alternative. As stated in the document: "It is clear that the anticipated ability to break-even depends on which demand projections are used in the calculation" (page 61, FEIS).

RESPONSE TO COMMENTS FROM SIERRA CLUB: MARYS PEAK GROUP, CONT.

- We have no intention of misleading the reader. The permittee will be required to demonstrate the economic feasibility of each phase of development prior to construction.
5. Please see response number 6 from Waldo Wilderness Council, regarding snow accumulation on the north side.

Marginal snow conditions at Willamette Pass usually occur not because of snow quantity but rather snow quality due to its south exposure. This is especially the case in the later part of the season when bright sun turns the snow to slush. North side runs would offer significantly better snow quality which would attract more skiers thus increasing the economic stability of the ski area.
 6. Even during marginal snow conditions, it is anticipated that some less exposed runs like Kaleidoscope and Perserverance will have sufficient snowpack to allow for skiing back to the base areas from the summits of Eagle and West Peaks.

If insufficient snow exists on these runs, transporting skiers down the lifts to the base area would be a viable alternative. This is a common practice at many ski areas when inadequate snow exists to ski at lower hill elevations. It is anticipated, except during a severe winter drought, that skiers will be able to ski down to the midway loading station at the 5800' level on the south side. There they could be loaded on the lift for the return ride to the base area.
 7. The data is presented in Table IV-19 page 60b following Mr. Tim Odell's example.

The demand projections assume fair to good snow conditions. In context "fair" means mediocre, ordinary or average snow conditions.

Three different site attraction indicators are used to calculate the demand projections.

Method I calculations are taken from the University of Oregon, Department of Urban Planning Study (1985). Method II (low) is based on a questionnaire given in Eugene ski shops over the 1983-84 winter season by a Sheldon High School class. The questionnaire sample size was 297. Responses indicated the skier's next ski trip destination.

RESPONSE TO COMMENTS FROM SIERRA CLUB: MARYS PEAK GROUP, CONT.

Method I (high) is based on a survey conducted in the spring of 1984 at Willamette Pass Ski Area. The survey asked respondents to rank the three ski areas in terms of preferred ski location.

Method II projections are based on actual skiers use at Bachelor, Hoodoo and Willamette Pass Ski Areas during February 1984 and 1985. (See Appendix D).

We conclude that the anticipated ability to break even depends on which demand projections are used in the calculations. Development will be phased in over the next ten to fifteen years. The permittee will be required to demonstrate: 1) a market need for additional facilities (based on updated use information and trends); 2) economic feasibility; and 3) cash or assets to build and operate the proposed facilities.



Emerald Chapter
Native Plant Society of Oregon
1826 1/2 Lincoln St. - Eugene OR 97401

4 March 1985

Mr. Michael Kerrick, Forest Supervisor
Willamette National Forest
211 East Seventh Street
Eugene, OR 97430

Dear Mr. Kerrick:

In regards to the Willamette Pass Ski Area Draft Environmental Statement, on pages 29-30 under the heading "Sensitive Plants", the presence of "special habitat types" in and near proposed ski development and trail relocation areas is indicated, yet only a "preliminary reconnaissance" for sensitive plants was conducted. There is in fact no evidence in the draft EIS that an adequate botanical inventory was conducted. In the final EIS we would like to have the following questions addressed:

1. What plants occur in the ski development and trail relocation areas? 1
2. What special habitat types occur in these areas? 2
3. What plant species are indicative of these special habitat types? 3
4. What sensitive plants occur or might be expected to occur in these areas? 4
5. What plants occur in Douglas Horse Pasture and the meadows along Skyline Creek? 5

It appears that little attention is being given to the occurrence of sensitive plant species in the selection of an expansion alternative. We recommend that before any of the north slope expansion alternatives are considered, a qualified botanist conduct a complete botanical survey over a complete field season in the areas under question.

Sincerely, *Leigh* Ho
Leigh Ho, Ph.D.
President, Emerald Chapter
Native Plant Society of Oregon

*3-4-85 cc sent to Oakridge
" " route in SO*

RESPONSE TO COMMENTS FROM NATIVE PLANT SOCIETY OF OREGON, EMERALD CHAPTER

- 1-6. Refer to Appendix F for response to comments 1 through 6. For further information, the analysis file for Willamette Pass Alpine Winter Sports Site is available for review at Oakridge Ranger District.

cc: David R. B. B. B.
"Avalanche 50"

Obsidians, Inc.
Post Office Box 322
Eugene, Oregon 97440

Michael A. Kerriek
Forest Supervisor
Willamette National Forest
Post Office Box 10601
Eugene, Oregon 97440

Dear Mike:

On behalf of the Board of Directors of Obsidians, Inc., I'd like to express our admiration for the fine work done by the Forest Service in your D.E.I.S. responding to the proposed expansion of the Willamette Pass Ski Corporation. Your environmental analysis is comprehensive and thorough. And best of all, it develops an alternative we enthusiastically support.

Board members present at our February 6th meeting passed a resolution to endorse Alternative #2, which adds a lift on the south side only, increases capacity of people from 2,177 to 3,688 and skiers from 1,851 to 3,135 at one time, leaves the ski runs at 77 acres, adds 2.5 miles of groomed cross-country ski runs, increases parking required from 627 to 1,037 cars and from 7 to 12 buses, increases sewage and water needs for 2,177 people to 3,688, leaves the roads at 2.75 miles, but increases parking lots from 9 to 11 acres.

Our reasons for choosing to support this alternative are that it

- would not risk polluting Cold Lake Bog Research Natural Area,
- causes no displacement or loss of wildlife habitat,
- requires no new roads to be constructed into roadless areas,
- would not affect the visual quality of the area as seen from Odell Lake and Maiden Peak as would the alternatives involving north slope lifts with their concomitant timber cutting.

The Obsidians appreciate the fact that further expansion would add more groomed trails for Nordic skiing. However, we are not in favor of the recreational use of skimoobles in this area (there seems to be no mention of motorized vehicles of this sort in the summary.) We feel that their noise pollution would be unacceptable in any case and hope that the developers of Willamette Pass Ski Area feel the same.

Thank you for your study of the area and for inviting our comments.

Sincerely,

Dallas Cole

Dallas Cole, conservation chairman
Obsidians, Inc.

RESPONSE TO COMMENTS FROM OBSIDIANS

1. The recreational use of snowmobiles would not be permitted on the proposed groomed trails for nordic skiing. It is foreseeable that snowmobiles will be used by the permittee for maintenance of trails and evacuation of injured skiers.



Oregon Natural Heritage Data Base

1234 NW 25th Avenue • Portland Oregon 97210 • (503) 228-9550

February 28, 1985

Michael A. Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97440

Dear Mr. Kerrick:

Thank you for the opportunity to respond to the Draft Environmental Impact Statement for the Willamette Pass Ski Area. We have reviewed the document for the Oregon Natural Heritage Data Base paying particular attention to its treatment of rare, threatened, and endangered species and unique communities within the affected area. Overall, the EIS adequately discussed the concerns we have regarding individual species, especially the wolverine (*Gulo gulo*) which is limited in abundance in Oregon. As indicated in the EIS, ski area expansion will undoubtedly add to the effect of decreasing habitat for the wolverine that is occurring throughout Oregon. However, we still have some reservations about the possible threats that the Preferred Alternative may have on Gold Lake bog and the unique species found there.

The Oregon Natural Heritage Data Base maintains extensive files on natural "elements" that occur in Oregon. These elements include rare, threatened, and endangered plant and animal species and natural communities. We also keep records on all of the Research Natural Areas and other managed areas found in Oregon. Gold Lake bog was designated as a Research Natural Area in 1965 to protect what is described as the best example of a Sphagnum bog in the Oregon Cascades. The RNA is home to half a dozen unique aquatic plant species and several unusual communities and is critically dependent on the water input from Skyline Creek. Furthermore, Gold Lake bog RNA fills five cells in the Oregon Natural Heritage Plan, which was mandated by the Oregon Legislature (ORS 273.576) to protect the full spectrum of Oregon's tremendous natural diversity.

We would first like to bring your attention to the recent occurrence documentation of the solitary sandpiper (*Tringa solitaria cinamomea*) at Gold Lake bog. This bird, which is rarely seen in Oregon, was observed in the bog in 1984, nesting with young (Oregon Birds, Vol. 10:127, 1984). This would be only the second known occurrence of nesting in the continental United States for

The Nature Conservancy

3185 sent to Bland
3185 noted in 50

1

this species, which usually breeds in northern Canada and Alaska. Any possible disruption to this species would be very unfortunate and should be avoided.

The primary concern that the Oregon Natural Heritage Data Base has with the Preferred Alternative for the Willamette Pass Ski Area is the potential degradation of Gold Lake Bog. Degradation could come from two possible sources, erosion due to construction activities at the Ski Area and, more importantly, from diesel fuel used to power ski lifts on the proposed north-side development. A diesel spill reaching Skyline Creek would severely impact the bog and the rare plant and animal communities that inhabit the area. The EIS rates the potential for such a spill as low but that the severity of such an occurrence is moderate to high. We would like to see these terms--low, moderate, high--further defined to give a better idea of the threat involved. For instance, have there been spills in the past at Willamette Pass Ski Area or other ski areas and what were the effects? Also, there must be some information available on the effects of diesel spills on Sphagnum bogs or wetlands which would be relevant to the Willamette Pass Ski Area situation. This information needs to be included in the EIS to adequately assess the risks involved in the proposed development.

An additional concern is with the seeming lack of detail in the EIS for mitigation measures designed to protect Skyline Creek and Gold Lake bog in the event of a diesel spill. The punice soils in the area are very porous and would offer little resistance to the percolation of the diesel fuel into the water table. Thus any spill that may occur would quickly enter the groundwater system and Skyline Creek, even with the use of early warning systems and hazard spill contingency plans. We believe that better thought out mitigation measures, such as impermeable catch basins, are in order for such a potentially disastrous event.

Because of the potential threat to Gold Lake bog and the severe consequences of a diesel spill into Skyline Creek we cannot recommend development of north slope skiing at Willamette Pass as it is presented in Alternatives III, IV, V, or VI. We are not altogether sure it would be possible to provide truly effective mitigation measures to prevent severe impacts from a spill in the drainage basin. Therefore we would recommend that the use of electric-driven ski lifts be required in this case to avoid potentially harming this critical natural area of Oregon. Thus far it has been possible to develop Willamette Pass Ski Area without seriously affecting the surrounding natural environment. We would like to see the Ski Area continue in this direction.

Sincerely,

Dick Vander Schaaf

Dick Vander Schaaf
Public Lands Protection Planner

cc: Sarah Greene, RNA Scientist

4

3

2

RESPONSE TO COMMENTS FROM OREGON NATURAL HERITAGE DATA BASE

1. We very much appreciate your sharing of this important information. We share your concern for disruption of the sandpiper but we consider it unlikely that the expansion proposal would create any adverse impact at Gold Lake. We will use this information in any future management decisions which might involve Gold Lake, and we encourage your continued sharing of any information you feel could help us.
2. See response number six to Oregon Department of Fish and Wildlife (ODFW) for a discussion of mitigation measures. There have been no reports of diesel spills associated with fuel storage at Willamette Pass Ski Area or other ski areas in Oregon (personal communication, DEQ, Bend).
See response number 39 to Waldo Wilderness Council for possible effect of diesel spills.
3. See response number six to ODFW.
4. As stated in the document on page 33, each chairlift will have two power drive systems consisting of a diesel fuel direct drive and/or an electric drive power from a diesel generator. A 10,000 gallon fuel storage tank will be needed to operate for the entire season. We feel it is also possible to expand the facilities at Willamette Pass Ski Area without seriously affecting the surrounding natural environment.

SCHARPF'S

TWIN OAKS BUILDERS SUPPLY CO

February 28, 1985

Mike Kerrick
Willamette National Forest
PO Box 10607
Eugene, OR 97440

Dear Mr. Kerrick:

It may seem strange for a stockholder in Hoodoo Ski Bowl to write in support of the proposed expansion at Willamette Pass, but as a skier I feel that their development has had more to do with the positive changes at Hoodoo this past year than anything else. No longer can Hoodoo just sit back and take those skiers that come because of no other alternative to Bachelor. Now they can choose between the three. I think the increase of skier visits over last year by the areas has shown that more people will ski if the areas will improve their facilities and promote the sport. Willamette will always have trouble keeping snow on their south facing runs. Without the north side in a low snowfall year, they could be forced to close leaving skiers only two open areas. I think that as Willamette improves so will the other areas, giving skiers better skiing at all the areas.

Sincerely yours

Tad Scharpf
Tad Scharpf

990 WEST FIRST AVE
P O BOX 887

PHONE 342-1261
EUGENE, OREGON 97440

3-1-85 cc: Willamette
3-1-85 cc: Nubia SD

RESPONSE TO COMMENTS FROM SCHARPF'S TWIN OAKS BUILDERS SUPPLY CO

1. We appreciate your response. This information is included in the FEIS.



Schaudt, Stemm & Wild, Inc.

CONSULTING ENGINEERS SURVEYORS AND PLANNERS

340 High Street

Eugene, Oregon 97401

503 485 8383

February 27, 1985

Mr. Mike Kerrick, Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick:

Our firm has participated in the development of improvements for the Willamette Pass Ski Area to date and offers our support of future expansion proposed to improve skiing facilities at the Pass.

The recent improvements to the facilities at Willamette Pass include many details that are not obvious to the general public but assist the operators in providing improved conditions for enjoyable participation in all of the skiing opportunities available at Willamette Pass.

Improved access to site and parking plus expansion of parking lot areas north and south of Highway 58 have been constructed. Improvements in the water supply, treatment, storage and piping of domestic water on site including provisions for doubling water storage capacity were completed. Fire protection is improved with the installation of fire hydrants and piping is roughed in to serve an automatic fire sprinkler system to protect future Lodge expansion.

Sewage disposal facilities have been replaced and expanded to include septic tanks with capacity of 21,000 gallons, and construction of an intermittent recirculating sand filter unit to improve effluent quality to exceed all requirements of the Dept. of Environmental Quality. Wastewater Pollution Control Facilities permit for this facility. New seepage beds for disposal of the filtered effluent have been constructed to accept a pressurized distribution network. Present operating capacity of the system is an average daily flow of 12,500 gallons with options for modifications.

A self-contained diesel powered electrical generator unit serves all of the power needs of the facilities on site fueled by an underground diesel storage tank.

Two new chair lifts were constructed in 1982 and 1983 to improve access to more ski slope areas.

*5-1-85 cc. Sent to Oakridge
5-1-85 cc. Mailed in SD*

Mr. Mike Kerrick, Forest Supervisor
February 27, 1985
Page 2

A vehicle maintenance shop building was constructed in 1982 to allow on site repair and upkeep of all vehicles.

The Lodge building constructed in 1983 includes basement service area, two floors of public use areas with provisions included for the expansion of two additional floor levels inside the present enclosure. Additional access areas, solarium and other amenities are also planned.

The former Summit House Lodge has been remodelled to improve facilities for the Ski Patrol personnel and expansion includes additional planned floor areas.

Details of the maintenance, cleanup, and removal of stumps in the ski run areas to improve the slopes and keep the entire site cleaned up have also been accomplished.

In our opinion, the Willamette Pass Ski Corp. has demonstrated by their actions to date that they are capable developers and operators to manage this recreational ski area.

The skiing facilities at Willamette Pass should be expanded to offer additional and varied skiing options for recreational skiers and tourists alike.

The impact of the expansion will be reflected in the increased employment of skiing and service personnel who presently share in a major payroll income for this area.

The construction and operation of this facility has generated considerable sales for equipment suppliers throughout Oregon, including service, utility, mechanical, electrical and construction items, plus regular deliveries of food and supplies.

Construction materials of all types have been incorporated in this project area, all manufactured and/or obtained within the state.

The location is ideal for recreational use for the many people residing in the southern Willamette Valley area to limit time and travel to utilize these excellent skiing facilities and planned expansion.

Sincerely,

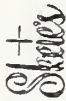
SCHAUDT, STEMM & WILD, INC.

E. H. Schaudt
E. H. Schaudt, President

EHS/cs

RESPONSE TO COMMENTS FROM SCHAWDT, STEHM AND WILD

1. This information has been included in the FEIS.



JEWELERS, INC.

January 31, 1985

Mr. Mike Kerrick, Forest Supervisor
Willamette National Forest
P. O. Box 10607
Eugene, Or. 97440

Dear Sir:

As an avid skier and backpacker, I felt compelled to write a letter in support of the expansion plans at Willamette Pass area.

Oregon has a long and proud tradition of protecting it's wilderness areas and Valdo Lake is certainly an exceptional area, however, the positive benefits of expanding Willamette Pass greatly outweigh any negatives.

Willamette Pass is unfortunately located five miles from a wilderness area, but five miles is a long way. Expanding Willamette Pass would provide fine skiing opportunities at a much shorter distance to the South Willamette Valley than any other area. It allows many more people to utilize and enjoy the Willamette National Forest. It provides jobs in an increasingly more important industry, tourism. Because the proposed expansion is on the North side of the mountain, where the sun is less intense, the ski season becomes longer with more good skiing days. Also, by making the ski areas we now have accommodate more people, there will be less need to construct new ski areas. (1)

I hope you will look favorably on this much needed expansion.

Sincerely,

Richard Skeie

Richard Skeie

RS/et

MEMBER AMERICAN GEM SOCIETY

TELEPHONE 345 0354 • 1027 WILLAMETTE STREET • EUGENE, OREGON 97401

TELEPHONE 342 4498 • 259 VALLEY RIVER CENTER • EUGENE, OREGON 97401

*2-1-85
CC sent to bridge
"noted in SO"*

RESPONSE TO COMMENTS FROM SKEIE'S JEWELERS, INC.

1. Agreed. As discussed in the FEIS on page 4, this is a Region 6 and Willamette National Forest priority.



Waldo Wilderness Council

PO Box 337
Eugene, Oregon 97440

Michael Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97440

27 February 1985

Dear Mr. Kerrick,

We have completed our review of the Draft Environmental Impact Statement (DEIS) for the proposed expansion of the Willamette Pass Ski Area and have attached a detailed critique of the proposal.

We feel that this suggested change in land use for the Roadless Area on the north side of Eagle Peak should be handled in the ongoing Forest Planning process. This process will decide with thorough public participation and review what the land use allocations for the Willamette National Forest will be. Making a decision now to develop the north side would short circuit any opportunity for other uses. With release of the Forest Plan barely six months away, it is prudent to wait.

Of the alternatives presented, we support the choice of Alternative II. It allows for a significant increase in skier numbers without the associated unacceptable environmental impacts of the preferred alternative.

The Waldo Basin is one of the last and certainly the largest relatively undeveloped lake basins in the Cascades. Its pristine qualities make it a unique and valuable area for wildlife. It supports populations of big game such as deer and elk, the threatened and endangered wolverine, and other rare species like cougar, marten, and fisher. Over eighty species of birds frequent the Waldo Basin, including species requiring solitude, such as the Northern goshawk and the Three-toed woodpecker. All alternatives involving north side expansion, including the preferred alternative, negatively impact all these animals.

Gold Lake, Gold Lake Bog, Skyline Creek, Douglas Horse Pasture, Odell Lake, and Salt Creek are all downstream from proposed development; all could suffer from construction activity, increased erosion and sedimentation, sewage runoff, and possible diesel fuel spills. These areas are of

considerable botanical and recreational interest; the DEIS does little to allay concerns about these possible occurrences or to list the potential impacts of such events.

The preferred alternative, if chosen, would require moving the Pacific Crest National Scenic Trail. This Congressionally designated trail should not be moved subject to the whim of developers.

A true cost-benefit analysis is lacking. Possible benefits are discussed in detail but without documentation, while possible costs and losses are ignored or dismissed with a wave of the hand.

In reviewing this document, it became obvious that, because of the desire to produce the DEIS at a time of maximum skier use, the production was rushed. The lack of supporting documentation, inadequate research (or its complete absence), confusing text, and numerous typographic errors (Mt. Fuji?) are certainly examples of where speed appeared to be more important than producing a competent professional document. The goal to produce a DEIS that details potential environmental effects was not met because of the evident haste to produce this impact statement. The DEIS unfortunately fails to provide a document which allows the public to offer informed input on this project.

We are confident that you will find the following comments well organized and documented, reflecting the many hours of volunteer time spent to produce this response.

Sincerely,
David Stone
Alan Copsey

David Stone, director
Alan Copsey, chairman
Waldo Wilderness Council
P.O. Box 337
Eugene, Oregon 97440

cc: Senator Mark Hatfield
Senator Bob Packwood
Congressman Jim Weaver
Representative Carl Hosticha
Representative Larry Hill
Lane County Commissioners, c/o Jerry Rust
Brian Ross, Environmental Protection Agency, Seattle
Oregon Department of Fish and Wildlife
Bill Lynch, Eugene Register-Guard
Gwynn Schultz, Lane County Audubon Society
Dallas Cole, Obsidians
Fred Minor, Izaak Walton League
Oregon Natural Resources Council

COMMENTS AND QUESTIONS
REGARDING THE WILLAMETTE PASS SKI AREA
DRAFT ENVIRONMENTAL STATEMENT

prepared by
Waldo Wilderness Council
P.O. Box 337
Eugene, Oregon 97440

GENERAL COMMENTS

We support Alternative II in the DEIS. Under this alternative the area can serve 69% more skiers at one time without expanding beyond the currently developed area.

The locations of ski runs are not included; it is impossible therefore for the public to comment on their placement with respect to visual quality, soil and water impacts, biological effects, and economic analysis.

Public assessment of such issues as forage reduction, potential damage to habitat, etc., is not possible when such terms as "slight" and "minor" are used in place of quantitative estimates. These terms are unacceptably vague and evasive. Better evidence and description of impacts and benefits are required.

Fuji Mountain (not "Fuji" Mountain) is the correct name for the peak to the northwest of Eagle Peak.

Supporting documents, such as the Willamette Pass Ski Area Master Plan 1983 (p. 27), referred to frequently, are not available to the public. Many citations, such as Blue Enterprises, Inc. 1981 (p. 26), are not sufficiently complete to allow public access and review.

SPECIFIC COMMENTS

p. 15 - No measures to restrict or regulate motorized entry via proposed catchline road are presented.

p. 26 - The DEIS projects inadequate snow three out of every ten years during the Christmas holiday season. It also refers to the Christmas season as "critical." Therefore, this projection does not support major expansion of this facility. Yet, after a brief reference to snow "farming," this problem is virtually ignored, in spite of its centrality in considering the suitability of the area for expansion.

p. 26 - The decision favoring "snow grooming" and "farming" is not supported by an adequate description of these processes. What kind of machinery is involved? What resources are consumed - water? power? How often is the technique used? What is the effect on the vegetation? wildlife? soil? air? watershed?

p. 26, 37 - Ski lifts D and E are located in an avalanche hazard zone, yet are to be placed off limits during high hazard periods. The length of time during the ski season that these lifts will be closed is not stated and not incorporated into usage estimates. The environmental consequences of blasting to reduce avalanche hazard are not addressed.

p. 27 - Skyline Creek is depicted as a Class III stream (no fish), when in fact, it is Class II, supporting trout (Oregon Department of Fish and Wildlife, personal communication). Recommendations based on Class III designation are invalid.

p. 27 - Gold Lake is managed by Oregon Department of Fish and Wildlife to preserve the pristine alpine setting of the lake (ODFW, personal communication). No discussion of how expansion would impinge upon their objectives is offered. No evidence of any communication with state authorities regarding the impacts of various alternatives is mentioned.

p. 27 - Wildfire potential during construction and summer maintenance activities is ignored. Slash to be placed for wildlife mitigation is a fire hazard and is not considered as such.

p. 28 - Anecdotal evidence (such as reports by ski area personnel of elk activity) does not substitute for scientific data. No evidence is presented regarding elk and deer use above 6,000 feet, yet the assumption is made that their use is very limited. How many animals frequent the area? Upon what resources in the area do they depend? How plentiful are these resources and how are they distributed with respect to the planning area? How does the seasonality of their use overlap with proposed human activities?

p. 29 - Marten habitat improvement by small scattered clearcuts has not been established scientifically and is still open to question. Maser, et al. (1981) cite evidence suggesting that martens are intolerant of areas lacking overhead protection of living trees of climax or near climax species and avoid entering open areas.

14
P. 29 - Fishers also avoid entering open areas (Maser, et al. 1981). Since Fishers breed from February to April (Maser, et al. 1981), their breeding seasons are subject to disruption by skiing. Resulting changes in population level or habitat use should be considered.

15
P. 29 - Other fur-bearers which occur in the area (e.g., short-tailed weasels, long-tailed weasels, and minks) are not even considered in the DEIS. Both biological disruptions and effects on fur trappers should be included.

16
P. 29 - No mention is made of several notable species known to inhabit the area that are dependent on large expanses of old trees, such as northern goshawk, northern flying squirrel, several species of woodpeckers, various amphibians and many others.

17
P. 29 - Although the presence of bald eagles is noted, no attempt to discover locations of their nests and possible adverse effects on their breeding success is made.

18
P. 29 - Pacific silver fir, a major tree species in the area, is not mentioned. The relative proportion of the stand occupied by each species is not given, yet this proportion takes on much significance when estimated value of the timber is considered (p. 75), since the tree species in the area vary widely in value.

19
P. 29 - Reference is made to "pore pockets" without any discussion of their cause, their tendency to expand in area over time, the potential hazard associated with falling trees that have been killed by the responsible fungus, and any possibility of anthropogenic spread of the fungus.

20
P. 29 - A "preliminary reconnaissance" is inadequate to assess whether sensitive, rare, threatened or endangered plants are present in the project area. "Special habitat types" are not described or located and no mitigation measures are proposed for their protection.

21
P. 29 - Affected vegetation is not adequately described. Nor is evidence given that an adequate botanical survey has been done. No plant list is given, and no independent botanist has been consulted. Specific attention should be given to Gold Lake Bog and Douglas Morse Pasture, both areas in which unusual flora are possible. Botanical investigations should be made at appropriate times of the year, from late spring through late summer.

22
P. 30 - Appropriate literature is not cited which indicates the source of evidence used for consideration of affected species and habitats in Gold Lake Bog, and for conclusions regarding potential risks and mitigation procedures. In addition to several sensitive carnivorous plant species,

there are plants of scientific interest, including *Scheuchzeria palustris*, usually placed in a family of its own, and the rare bog birch, *Betula glandulosa*. There are unusual amphibians (especially salamanders and frogs) which have been the subject of extensive scientific research by Dr. James Kezer at the University of Oregon and others. This research has provided significant contributions, especially in the field of genetics.

23
P. 30 - Special habitat types are noted but not described or evaluated. Where are they? How are they special? How might they be affected by development? What mitigation measures are possible?

24
P. 30 - The current designation of WPSA as a winter recreation area expires with the new Forest Plan due out this year. Consideration of this proposed expansion should be done within the scope of this Forest Plan. Premature approval of this expansion beyond the current permit boundary precludes other possibilities for the adjacent Maiden Peak Roadless Area.

25
P. 31 - The area immediately north of the study area is erroneously described as "a large tract of developed land," when, in fact, it is undeveloped.

26
P. 34, 65 - A three day cultural resource inventory covering 136 out of 700 acres cannot adequately evaluate the potential of the area. It is asserted that cultural resources found during construction will cause construction to be halted--who will be looking for these resources during construction? How will this person's autonomy and authority to delay construction be maintained?

27
P. 34 - The effect of the noise of ski grooming equipment is minimized by ascribing it to the night and early morning hours, when in fact, that is the time when noise is most disturbing to the nocturnal and crepuscular animals threatened by this development, as well as snow campers. Indeed, elk are active at night and their preferred hours of activity are those of twilight and dawn (Maser, et al. 1981). Snow grooming, combined with the noise of lifts, generators and ski patrol snowmobiles assures that there will be no time of quiet in the area.

28
P. 34 - In view of the visual impact of so-called partial retention currently on the south side, and given the low visual absorption capability of the entire study area, the same objective for the north side is unacceptable, since it is visible from virtually the entire Waldo basin. While surveys of current south slope users have been conducted (p. 81), no similar poll of current north slope and Waldo basin users has been attempted. Presenting the results of a poll of one segment of the users should not be interpreted as

indicating widespread public demand for north side development.

36 - Alternative measures for dust reduction are not presented adequately. In a subalpine climate, "prompt revegetation may still require a number of years (one need only look at 10 year-old road cuts along the Waldo Road to find evidence of slow regeneration); what alternative measures would be used in the intervening time? What is their cost and effectiveness? What effects, if any, would they have on subsequent regeneration?

37 - No provision for evaluation of revegetation success is made. 100% recovery of ground vegetation after five years may be an unrealistic expectation, and in any case is asserted without evidence. No measure (e.g., cover, biomass, number, density, height, use by wildlife, etc.) for evaluation of regenerative success is given. The effects of short-term erosion on potential revegetation is not discussed. Species to be used are not listed; introduction of exotic species into an area so near to wilderness and primitive areas and so highly valued by the public is unacceptable.

38 - The impacts of erosion and sedimentation caused by leaving up to 48 acres of bare soil are not discussed. Simply listing the acreage, as is done, does not describe the effects.

39 - Specific details regarding logging methods have not been presented for public comment. What mitigation measures are to be incorporated? How would brush control be practiced? How many entries into the area would be required for logging?

40 - How many years are expected for 80% successful revegetation to occur? How might an unexpectedly long delay in regeneration affect the economic analysis (since one area must be 80% successfully revegetated before new construction or clearing can begin)? Since the estimates of profitability are marginal at best (usually predicting losses rather than profits--p. 82), the effects of possible delays should be carefully weighed.

41-43 - How was the figure of 80% arrived at? This percentage is used with regard to revegetation and erosion control.

44 - No evidence is given for the assertion that no detectable changes in water quality will occur during construction. Simply stating it does not make it true.

36 - That construction might extend over several summers (p. 113) is not considered. For example, what is the cumulative effect of repeated summer sedimentation on Skyline Creek? What levels are expected? How many years can expected levels occur without permanent damage to the stream? How might wildlife be displaced by several summers of construction? Are effects cumulative and/or permanent? Might sensitive animals, such as fishers and wolverines, be driven away permanently? To what extent might the breeding of elk be adversely impacted? How will summer recreationalists be affected by construction noise and traffic?

37 - Public commentary on sewage disposal proposals is not possible since the system was not finalized at the time of the DEIS. The assumption of 5 gallons per day per person of sewage is unrealistically low; neither sewage capacity nor water supply is adequate for a more realistic usage. We understand that the proposal for sewage disposal utilizes a surge capacity; how will this system hold up under an extended heavy use period, such as the Christmas holiday season? What is its short-term capacity and its extended capacity? Extreme weather conditions can reduce the processing capability of the system; this reduction is not addressed. No provision for monitoring of the system and no contingency plans in case of problems are made.

38 - Sewage disposal provisions at a proposed summit lodge are not described. Sufficient investment must be required by the Forest Service so that adequate sewage facilities are guaranteed.

39 - A diesel spill might dilute rapidly, as claimed in the DEIS, but dilution results in a larger area being affected. What is the time course of such dilution? How far can diesel fuel be expected to travel? Since diesel fuel floats near the surface, it is unclear how soil can be invoked as a filtration system. Although the DEIS states that sensitive plants in Gold Lake Bog could be affected by a spill, and that impact would be significant, no discussion of the nature of those impacts is provided. What is the basis (i.e., evidence) for the risk analysis on page 47? What is considered to be "high" severity or "low" probability? If the risks cannot be quantified adequately to allow objective assessment of their likelihood and severity, then perhaps large enough gaps occur in the available information to require a worst case analysis.

40 - Changes in water runoff seasonal patterns are not discussed in terms of their impacts on streams and bogs, including Gold Lake Bog. For example, how does permeability of the soil change during winter, spring runoff, and summer drought? Is it diminished such that effects from a diesel spill might be more catastrophic at one time of year than

another? If so, how does the seasonal risk compare with seasonal human use?

p. 45 - Mitigation measures for Gold Lake Bog contain no provisions for monitoring; no baseline has been identified against which to measure changes.

p. 45 - Certain restrictions are to be placed on the permittee, including the maintenance of water quality, prohibition of stump removal and the salting of ski runs, and prior and continuing approval of sewage disposal plans. How are such permit provisions to be enforced? Through fines? Warnings? Shutdowns? No enforcement measures are suggested.

p. 46 - Fungi reductions are noted several times as impacts of development. Given the importance of fungi as food sources for many of the animals in the area (Harris 1984), what are the impacts associated with fungi reduction? Which animals would be affected? What times of year would effects be most severe? How severe would they be? Would mycorrhizal fungi also be affected? What effect would the reduction of mycorrhizae have on the forest itself?

p. 48 - The forests in the area are not so dense nor the topography so rugged that elk need roads built to aid their migration. This suggestion appears to be a concocted benefit of the catchline road.

p. 48 - A mitigation proposed to maintain elk migration routes is to not build lift E; however, lift E is contained in the preferred alternative. This is a contradiction.

p. 48 - That 37,000 acres of Waldo Country now in wilderness is not mitigation. Mitigation involves creating something new to replace something which is lost; considering the Waldo Wilderness to be mitigation is a misapplication of the term, the concept, and the intent of the law.

p. 48 - Since the proposed summit lodge is designed to attract visitors throughout the year, moving its location a few hundred feet would negate any mitigation suggested by such a relocation. Ward, et al. (1973) state that elk maintain a half mile buffer zone from human activities, and that when human activity shifts, elk shift to maintain this buffer zone.

p. 51 - "Primary detrimental effects on fishers appear to be direct mortality by trapping." Yet trapping of fishers is illegal in the State of Oregon. Proposed mitigation measures are that development will diminish trapping; this is not an acceptable mitigation measure, given that trapping is already illegal.

p. 51 - Trapping of marten in the Oregon High Cascades has been very limited in the last decade. Loss of habitat results in more permanent population reductions than the historic level of trapping.

p. 51 - No evidence is brought to bear on the relationship of planting ski runs to big game numbers. It is assumed that big game animals will flourish with development although certain important types of spring food sources (e.g., fungi) will be negatively impacted.

p. 51 - Mitigation measures for furbearers contain no provisions for monitoring population levels; no baseline has been set against which to measure changes.

p. 51 - No documentation is given that martens will benefit from the presence of piled slash along ski runs.

p. 51 - There is no support for the conclusion that martens are compatible with expansion.

p. 53 - The caption for Table V-6 biases the impacts by failing to mention that the area is lost from old growth forest, the natural ecological community in the area.

p. 54 - How and when was a plant survey carried out? Since the decision to complete a DEIS was made in October and it was released in January, doubt is cast upon the validity of the survey mentioned. If there was such a survey, why are its results not included in the DEIS? Who conducted the survey? What plant species were found? What sensitive plants are known from Gold Lake Bog? What are their habitat requirements? What special habitats are known to occur? How would they be affected by development?

p. 54 - Approval of any expansion does not involve a permanent commitment (as stated), since the Forest Service can terminate a lease on the area if the lessee does not meet requirements set forth by the Forest Service or if changes are made in the Forest Plan.

p. 58 - A summit lodge is not needed to view Diamond Peak, since a spectacular view is gained from Highway 58 in several places en route to Willamette Pass. In view of the potential problems associated with such a lodge, and since base area capacity would not be expanded, a summit lodge has not been justified. This "justification" for its construction should be deleted.

p. 59 - The preferred alternative changes land classification to roaded natural on the northern side of Eagle Peak and increase the likelihood of unacceptable impacts on Douglas Horse Pasture and other sensitive areas. It also reduces the classification of Maiden Peak from

primitive to semi-primitive non-motorized. These changes would be "permanent or irreversible." Therefore, the proper place to consider these changes is in the Forest Plan, where comments of users of these areas can be sought as vigorously as those of skiers have been for this document. Further, since these visual changes affect virtually the whole Waldo basin, a more wide-ranging and certainly less rushed consideration of human effects is warranted. Again, the Forest plan is the vehicle in which to consider these regional effects.

p. 61 - The willingness to displace numerous cross-country skiers from their traditional routes unless they are willing to pay fees seems a bit calloused at best.

p. 62 - Is there any precedent in the Cascades for summer use of ski areas that would warrant the trail development described. No evidence is given for the assertion that trail development reduces effects on soils, vegetation, etc.

p. 63-4 - Wording used to describe general effects is biased. Terms such as "better", "improved", "more", and "higher quality" are used without documentation, and the contexts in which they are used seem to favor development without justification and minimize negative impacts. An objective, quantitative analysis of benefits and costs of each alternative is lacking.

p. 65 - The maximum noise level allowable is not presented. How many decibels are too many? How much is negligible?

p. 65 - The noise generated by snow grooming equipment produces 80 decibels at 21 feet. According to Halliday & Resnick (1981. Fundamentals of Physics, 2nd ed. Wiley & Sons) this sound level is between that of "city street, very busy traffic" and a "pneumatic drill", rather than a single automobile accelerating as stated.

p. 67 - Since the entirety of Gold Lake is used by recreationalists, a single viewpoint from the middle of the lake does not accurately assess visual impact.

p. 67 - From Waldo Lake, two view points are used from which the proposed expansion would not be visible, yet Eagle Peak is visible from most of the lake and from many places along the Shoreline Trail along the west shore of the lake.

p. 67 - Visual modification from Mt. Fuji, Mt. Ray and Maiden Peak is inadequately portrayed in the computer perspective plots. The computer assumes all trees are of equal size and that the trees are roughly equally spaced. The forest also appears much more sparse than it really is, which diminishes the visual impact of proposed clearcut openings. No account is taken of seasonal differences in

visual impact. Further, since the specific layout of the ski runs is not presented in the DEIS, there is no way for the public to assess the accuracy of the computer plots.

p. 67 - Visual quality is retained in all areas not already impacted in Alternative II. Visual modification from Mt. Fuji, Mt. Ray and Maiden Peak as portrayed in the computer perspective plots is unacceptable.

p. 68 - Highway 58 is assumed to have a capacity of 3850 vehicles per day. If these vehicles were evenly dispersed throughout a 24 hour day, one vehicle would pass a given spot every 22 seconds. Since traffic is not uniform, but peaks during daylight hours, and since an increase in skier numbers would result in morning and evening peaks as well, one can assume that there would be significant traffic problems along much of Highway 58 between Eugene and Willamette Pass, and especially on the last 12 miles before the pass, where the steep grades begin. Furthermore, the heaviest traffic might be occurring when road conditions are the worst. No evaluation of potential traffic snarls is included in the DEIS; rather the possibility of any problem is dismissed.

p. 68 - No documentation is given for the assumption of 3.2 skiers per car.

p. 69 - The document acknowledges increased costs of road maintenance on Highway 58 and increased numbers of accidents associated with higher traffic flow. The proposed mitigation is to require signs or a parking attendant. How will this measure have any effect on the problems to which it is applied? The proposed mitigation measure fails to address the problem to which it refers.

p. 70 - Well water in Crescent Lake Junction is in "insufficient abundance to meet the community needs." The conclusion that no shortages are anticipated should growth occur has not been reconciled with the previous conclusion. (Alternatively, this typographical error and the many others indicate rushed preparation of the DEIS, rather than the careful consideration intended.)

p. 71 - Conclusions regarding a public survey of Oakridge citizens are not documented. The manner in which sampling was conducted and the error associated with the results are also not included. What was the sample size? How reliable is the survey? How were the questioned framed?

p. 71 - It is not clear how support from the cities of Eugene and Springfield was measured. Certainly much public opposition has been expressed in these cities which has not been referred to. Personal contacts with public officials

in Eugene and Springfield indicates that no official position has been taken by either city.

p. 71 - The permittee is not an unbiased source regarding employment; a standard multiplier should be used to estimate employment, rather than the permittee's figures. No mention is made of the length of employment nor the wages to be offered.

p. 73 - A 72% increase in overnight visitors at Willamette Pass since the "early 1980's" is not shown to be statistically significant. From the evidence given, it appears that this increase is being compared with the 1980-81 season, when Willamette Pass was only open six weeks due to poor snow conditions.

p. 74 - Conclusions of a study regarding overnight accommodations should be made available for public comment before Forest Service approval is given. Since this study is to be done by the permittee, objective review should be sought.

p. 74 - Upon what evidence is a multiplier of 3 chosen to estimate secondary revenue generated? Upon what evidence is it considered to be "conservative?"

p. 74-75 - No formal consideration is given to economic costs associated with expansion. The economic analysis ignores the following:

- Economic impacts on other ski areas in the region, most notably Hoodoo Ski Area.
 - Losses suffered by Oakridge, Crescent Junction, and other surrounding communities if fewer hunters, fishermen, and cross-country skiers utilize the area because of real or perceived declines in resource quality.
 - Reduced income to the federal treasury if the Waldo Lake and Gold Lake facilities are not used as heavily.
 - Decline in yields of fur trappers in the Maiden Peak area.
 - Any economic or intrinsic value associated with wildlife, special habitats, unique or interesting flora, or any aspect of wilderness experience.
 - Educational and scientific values of the affected area.
 - Increased costs to the state for maintenance of Highway 58.
 - Increased costs to local communities associated with traffic control and law enforcement.
 - Any effects of inflation or of lessening demand for downhill skiing if trends reverse.
- Only the rosiest picture is presented, without any apparent discussion of possible problems.

p. 74-76 - No documentation is given regarding the source of the multipliers used in Table V-13. Use of these multipliers is further weakened by failure to include any discussion of where the money would be spent: what sectors of the economy can expect to receive secondary revenue? No mention is made of expected changes in rates of secondary revenues generated over time. For example, as the novelty wears off, might not a decline in skier numbers and in money spent per skier occur?

p. 75 - A value of \$150 per thousand board feet is far above market value for mountain hemlock (the dominant species), particularly when the stand has 30-40% defect (p. 29). Costs of logging may indeed exceed receipts obtained. No information is given regarding estimated costs of timber harvesting. The precision of the estimated yield per acre is suspect, since differing values are given (p. 29, p. 75). These errors and omissions have serious consequences for the estimated economic effects shown on p. 83-86.

p. 78,108 - The factors which are listed but not taken into account are stated so as to suggest that actual skier demand might be greater than estimated demand, when indeed the opposite is likely true. The following considerations should be included:

- The excitement of new facilities will wear off quickly and skier visits may actually decline.
- Current alpine skiers may drop out of the sport.
- The cost of transportation to the ski area may rise, reducing the number of annual visits.
- Increased traffic on Highway 58 may discourage travel to and from Willamette Pass.
- Frequent poor snow conditions may reduce skier visits.
- Other ski areas may expand or otherwise compete; indeed, Bachelor has already expanded recently, and Hoodoo has lowered its lift ticket prices.

p. 78 - Is this public demand actually demand for skiing at Willamette Pass, or is it merely demand for skiing? If all that is being dealt with is displacement of skiers from existing areas, then it becomes a transferable demand.

p. 78 - The data for one year do not indicate a trend in any case and provide no statistical basis for assuming the correctness of any of the projections; yet exactly this assumption has been made. It also appears that complementary tickets are included in baseline data; they should not be, nor should they be included when estimating the break even point.

p. 78-80 - Willamette Pass has already had a negative impact on Hoodoo. The increase in skier visits at Willamette Pass corresponds directly to the decrease at Hoodoo.

Furthermore, the data offered to show that Hoodoo and Willamette Pass draw from different markets actually show that the largest number of skiers at both areas come from Eugene-Springfield.

p. 81 - Where and how was the survey cited conducted? A sample size of 56 people out of more than 50,000 skiers per year seems particularly small and not adequate to judge significance.

p. 82 - Break-even analysis shows Alternative II to be more likely to break even than any other alternative except no expansion, although there seems to be serious doubt whether any alternative is really economically feasible (the document fails to seriously consider the economic problems apparent even in a flawed economic analysis). It would appear that sound business judgement would suggest Alternative I or II as the preferred alternative.

p. 83 - The conclusion that Alternative V receives the largest return per investment dollar using Method II ignores that fact that no alternative breaks even under low or high predictions.

p. 83-86 - No documentation is given for economic effects by alternative. No consideration is given to possible declines associated with impacts on other forms of recreation.

p. 83-86 - Economic discussion fails to distinguish what proportion of financial return is recirculated within the Lane County area, what percentage is expected to be added from outside Lane County, and how large a portion would leave Lane County and Oregon.

p. 83-86 - Economic returns from timber cutting is exaggerated, given the dominance of mountain hemlock in the area.

p. 99 - If the response to public concerns regarding the integrity of the adjacent undeveloped area is truly a response, then it should summarize the results of the analysis found elsewhere in the DEIS. It should list in a concise manner the impacts in acres, in habitat affected, on the integrity of the basin, visual impacts, etc. If all this section does is to refer to indistinct parts of the DEIS, then it is just filler to placate the public.

p. 99 - Were cross-country skiers polled as to their response to this proposal? Since there will be impacts and displacements of these users by the proposed expansion, then their preferences should be considered. How many cross-country skiers use this area? How many would be displaced by the expansion activity? Where will they go if they are displaced? The response to this question does not

respond to the issues related to hikers and backpackers; the response is incomplete.

p. 99 - Expansion on to the north side will provide a longer skiing season, but a longer skiing season does not imply better skiing. No assurance is given that all the environmental damage expected under the preferred alternative will create better skiing--only more skiing. The DEIS seems to question whether better skiing will result.

p. 100 - This expansion has been proposed because of an alleged need for winter recreation in the Willamette Pass Area. Given the large expected increase in the number of visitors to the area, a conclusion of "no significant increases in vandalism" is unwarranted. The Odell Lake area is located only 2 miles away, and summer homes along Highway 58 are even nearer.

p. 101 - No details or references are given as to how expansion will result in economic diversification of Lane County. This is one more in a series of undocumented assertions.

p. 100-101 - Since 93% of Willamette Pass skiers come from within 100 miles (p. 78), it is doubtful that the income from overnight visitors is as great as claimed. No supporting documentation is given.

p. 103 - Bob Jubber cited a wolverine in 1972 between Waldo Lake and Maiden Peak. DEIS's citation is incorrect.

p. 103 - This habitat risk analysis suffers from a common fault: local occurrences, when compared to a large enough area, will always be found to have no effect. The result is that habitat is taken away in small chunks, bit by bit, until the needs of a given animal--and eventually a given species--can no longer be met; and all the while no effect on the animal has been detected in the planning process.

p. 104 - Areas on the saddle between Eagle Peak and West Peak (the site of the proposed summit lodge) also have heavy use by big game and may be "key areas" for the wolverine.

p. 103-105 - Risk analysis for wolverines is inadequate and not properly documented. Contradictions in information given (e.g., range estimates) are not resolved or acknowledged. Inadequate information invalidates assumptions. The conclusion that only a small amount of area is affected ignores accepted knowledge that wolverines (or any other animal) do not equally use all parts of their range; a small area could be important for several animals. The loss of Douglas Horse Pasture would probably eliminate some number of wolverines, but the number is unknown. The

planning team reached a "group consensus" regarding the fate of the wolverine, but without someone knowledgeable about wolverines on the team, this consensus is probably meaningless. A brief discussion with a wildlife manager in lieu of proper research is not an adequate basis on which to make a rational decision.

p. 103-105 - The planning team obviously did not do adequate research of the scientific literature regarding the wolverine. Much is known about potential biological impacts associated with human intrusions. For example:

- the reproductive potential of the wolverine is quite low (Ingles 1965, Rausch & Pearson 1972);
- they bear their young in February or March (Rausch & Pearson 1972); this stressful part of their life cycle comes at a time of pronounced skiing activity;
- wolverine home range may be as little as 10 square miles (Quick 1953)--in which case many more individuals might be displaced than indicated in the planning document;
- most sightings of wolverines in Oregon occur along the summit of the Cascades at elevations above 5000 feet (Ingram 1973);
- Oregon Department of Fish and Wildlife has recommended additional study "to more closely identify habitat types preferred by these species [fishers, martens, and wolverines] in Oregon so that unique habitats essential to continued survival may be properly managed" (Robert 1982).

p. 105 - If the planning team feels that so little is known regarding the wolverine that "two to four Master and Doctorate degrees" could be generated, then how can a rational decision be made? Under provisions of law, if adequate information is not available, it must be obtained prior to a decision.

p. 105 - The planning team is not qualified to decide what constitutes an acceptable project for either a masters or doctoral degree; such statements have no place in a formal document.

p. 105 - The small costs associated with developing reliable information about the wolverine (required by law) is negligible in comparison with the projected income to the permittee or to the federal treasury. Obtaining adequate information is not a luxury but a legal requirement.

p. 105 - The "favorable topographic break" that would supposedly protect Gold Lake users from effects associated with an expansion are probably currently protecting wolverines in the Douglas Horse Pasture basin from disruption due to recreational use of Gold Lake. Therefore,

expansion would serve to drive wolverines out of the entire southern end of the roadless area by developing a key refuge.

p. 105 - Assuming reduced human activity in Douglas Horse Pasture due to rerouting the Pacific Crest Trail fails to take into account that increased skier activities in winter and maintenance activities in summer may drive the animals out of this area completely. How is rerouting a "positive effect?"

p. 105 - Alternative II is a sound alternative when wildlife and wilderness values are considered. For example, the key statement of the risk analysis regarding wolverines states, "Expansion involving only the south side of Eagle Peak would have little effect on wolverine habitat." The same statement is made regarding big game (p. 48).

p. 106 - Implementation of the preferred alternative would result in a high probability of wolverine habitat loss, yet no mitigation measures are proposed.

p. 108 - Population growth assumptions made by the Lane Council of Governments are not "moderate", but were optimistic when made and are probably unrealistic given the trends since 1970.

p. 108 - The assumption that snow conditions will be fair to good for the next 15 years is contradicted by the historical record, which indicates that inadequate snow conditions will occur approximately one third of that time period.

p. 110 - Fallacious logic is used when assuming that 15% of Lane County population skis at Willamette Pass.

p. 110 - Purjorative and biased conclusions are reached: method two is not shown to be conservative, except when compared with projections made by Willamette Pass Ski Corporation, in whose interest it is to present the most optimistic estimates. Also, no account is taken of poor snow years that can reasonably be predicted on the basis of the historical record.

p. 110-111 - No evidence is given that effects of new lifts are additive, i.e., that one new lift generates 20% more skiing visits, two lifts produce 40%, etc., yet this assumption is used to estimate demand.

p. 112 - The following costs are incorrectly assumed to be fixed:

- All labor costs
- Maintenance costs
- Fuel and utility costs
- Other materials and supplies
- Employee benefits
- Professional fees
- Insurance
- Taxes

-- Interest rates and other costs of financing
It is unreasonable to assume no variability or increase in these costs.

p. 112 - No estimate of capital outlays, fixed or variable costs is included for public evaluation of break-even analysis. Given the unrealistic assumptions regarding fixed costs, the validity of the published analysis is in doubt.

p. 112 - A restoration bond should be posted by the permittee to be used in case of catastrophic accident or contract default. This bond would be used to restore impacted areas to their pre-development state.

p. 113 - Given the varying terrain and the higher costs of accessing the north slope, it is unreasonable to assume that the capital outlay is the same for each north-side lift, and absurd to assume that installation of new lifts on the north side is no more expensive than upgrading an existing lift on the south side.

p. 113 - Construction may extend over several seasons, yet the effects of delayed expansion are not considered when projecting skier visits under each alternative.

p. 113 - The expected length of the ski season does not take into consideration the frequency of poor snow years. The average season length is certainly less than assumed.

p. 113 - No basis is given for the assumptions of labor and maintenance costs associated with each alternative.

p. 112-113 - Nowhere in the break-even analysis is the loss considered to the region, the state and the U.S. treasury associated with reductions at other ski areas (especially Woodoo) due to expansion at Willamette Pass. The economic analysis seems to be emphasizing the gains while ignoring the losses.

LITERATURE CITED

- Harris, L.D. 1984. The fragmented forest. University of Chicago Press, Chicago. 211 pp.
- Ingles, L.G. 1965. Mammals of the Pacific states. Stanford Univ. Press, Stanford, Calif. 506 pp.
- Ingram, R. 1973. Wolverine, fisher and marten in central Oregon. Oregon State Game Commission Central Region Administrative Report No. 73-2.
- Maser, C., B.R. Mate, J.F. Franklin, & C.T. Dyrness. 1981. Natural History of Oregon Coast Mammals. USDA Forest Service Gen. Tech. Rep. PNW-133. pp. 288-294.
- Quick, H.P. 1953. Wolverine, fisher, and marten studies in a wilderness region. Trans N Amer Wildf Conf 18:513-532.
- Rausch, R.A. & A.M. Pearson. 1972. Notes on wolverine in Alaska and Yukon Territory. J Wildl Manage 36:249-268.
- Robart, G. 1982. Wolverine, fisher, marten sightings in Oregon 1973-1982 supplementary report. Oregon Department of Fish and Wildlife Central Region Administrative Report No. 82-4.
- Ward, A.L., J.J. Cupal, A.L. Lea, C.A. Oakley & R.W. Weeks. 1973. Elk behavior in relation to cattle grazing, forest recreation, and traffic. Trans N Amer Wildl & Natur Resour Conf 38:327-337.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL

1. A map of ski runs has been included in the FEIS, (map number 17, following page 42).
2. Refer to Response to Comments from Oregon Department of Fish and Wildlife, numbers 8 and 9 concerning forage.
3. This typographic error has been corrected.
4. Documents are available for review at Oakridge Ranger District.
5. Access to the catchline road will be through the base area. The permittee will control the entry. Road restrictions will be included in the Special Use Permit.
6. An important reason for having ski runs on the north side was to ensure adequate snow for an early season and better snow conditions throughout the season.

There is a significant difference in snow accumulation between the existing southside development and the proposed northside area. On the base area at 5100 feet, the snowpack begins to accumulate from late November to early December. On the north side at the 5700 foot level, (proposed lower lift terminal of Lift D) snow accumulation begins in late October to early November. By mid-winter, (see Affected Environment Section, Snowfall: Quantity and Quality, page 16) snow records collected by the Soil Conservation Service and available for review at the Oakridge Ranger District indicate the north side at the 5700 foot level can have twice the snowpack as the existing base area has. It is apparent that early snowpack is sufficient for skiing on the north slopes even though there may be insufficient snow to ski the south slopes.

7. Snow grooming or farming is the compacting, blading, and tilling of snow surface by a snowcat with snow manuring attachments. Snow compaction helps to retain snow and permit skiing on a moderate accumulation of snow. In areas subject to windscur, snow fences are used to control snow deposition. Currently, Willamette Pass accomplishes their grooming with two diesel-powered piston bully snowcats.

Frequency of grooming depends on snow conditions and amount of use on particular runs. Normally, most ski areas compact their popular runs after every snowfall. Tilling and blading is done when runs become icy or mogully. The environmental consequences from snow grooming includes: noise and engine emissions in the immediate area of operation, retention of snowpack longer because snow is retained longer on slopes. This could have the effect of slowing growth of underlying vegetation in the spring and early summer and reducing maximum spring runoff in water drainages in the immediate area.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

8. The avalanche areas identified are low to moderate during severe snow conditions which usually occur once or twice a season. Unstable snow during this time could be sufficiently controlled by ski cutting and machine packing.

Blasting as a means to control hazard areas under most circumstances would not be required. The environmental consequences of blasting would be noise and gas emissions from the explosion and possibly disturbance of wildlife living in the area. In most instances, the snowpack will absorb the blast and insulate the underlying ground from damage.

Avalanche control work is usually completed prior to the arrival of the public to assure public safety and full utilization of area facilities. Closed lifts due to avalanche hazard conditions is not anticipated.
9. See Response to Comments from Oregon Department of Fish and Wildlife, number 5.

Recommendations in the project area were not based on stream classification of Skyline Creek. The closest activity to Skyline Creek will be from 600-800 feet. This distance far exceeds that which would require methods necessary to protect riparian resource values, regardless of Class II or Class III stream designation.
10. Gold Lake is managed by the USDA Forest Service (FS). The Oregon Department of Fish and Wildlife (ODFW) is responsible for managing the fishing while the FS is responsible for managing the habitat. Based on a draft ODFW Gold Lake Management Plan, the ODFW has 3 main objectives for managing Gold Lake. The ODFW recommendations are summarized as follows: 1) manage Gold Lake for self-sustaining rainbow and brook trout populations; 2) emphasis will be placed on providing anglers with trout of preferred species, abundance, and size in a basically natural alpine environment; 3) the ODFW objective with respect to the FS is to encourage the FS to retain the approximate current level of Gold Lake access and public facilities in order to provide the setting for a continued high quality angling experience (Draft Gold Lake Fish Management Plan, ODFW).

Concerns from ODFW are published in the Response to Comments section. In addition to these concerns, personal communication with Bob Hooton (ODFW) stressed a concern for visual impacts on Gold Lake. This matter is addressed in Response to Comments from Waldo Wilderness Council, number 64.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

11. Wildfire potential during construction and maintenance activities is not felt to be a problem. Specific fire prevention and preparedness measures are dictated by State and Federal law and terms of the special use permit, and permittee would be required to meet these.

Any slash which is not treated and placed for wildlife mitigation would not be a substantial fire hazard. This is considered an area of generally low hazard due to the elevation, short fire season, and fuel type. Any hazard from fuels placed for wildlife will be of a short-term nature and substantially reduced after one winter's snow load.

12. Wildlife management agencies commonly utilize reliable public input as an adjunct to data collected by professional biologists. We offer the recent state-wide elk workshop program of the Oregon Department of Fish and Wildlife as evidence. The remainder of this response is addressed generally in the Wildlife Assessment which is found in Appendix C.

Neither the Forest Service nor the Oregon Department of Fish and Wildlife know how many elk use the Willamette Pass area. We do know the locations of several travelways and high-use areas. These and other use patterns as observed by our biologist are discussed in the Wildlife Assessment.

13. We agree to the extent that the statement in the EIS may still be open to question; however, recent scientific literature is filled with references to the propensity of martens to travel and hunt the edges of openings, both natural and man-made. (Koehler and Hornocker 1979, Simon 1980, Soutiere 1979, Spencer 1981, Strickland et al (1982)). Further, some of these researchers report occasional marten use (hunting/travel) some distance within such openings. (Hargis and McCullough 1984, Grinnell et al 1957, Koehler and Hornocker 1979, Campbell 1979, Soutiere 1978, Simon 1980, Spencer 1981).

14. We find that very few researchers cite February as a significant month for parturition in fisher. Wright and Coulter (1967) state that some litters may be born in late February or early April, but most are born in March. Most researchers report mid to late March as the peak of fisher parturition. (Coulter 1966, Douglas 1943, Hall 1942, Powell 1977, Strickland et al 1982). We agree that if, in fact, fisher currently breed in the proposed expansion area, there is a potential for disruption or displacement of the animal. Winter travel circuits of the fisher range from 10 to 30 km in diameter (de Vos, 1951). In New Hampshire, Kelly (1977) reported densities of one fisher per 3.9 to 7.5 km², and yearly home ranges of 1500 ha (15.3 km²) for adult female fisher. The affected portion of the ski area

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

expansion on the north side of Eagle Peak is about 4 km². We consider the likelihood of disturbance to more than one breeding fisher to be low. Further, Kelly (1977) noted substantial overlap of ranges in all sex and age categories. Consequently, if a fisher were displaced, it may be able to establish a new nest den with little difficulty.

15. In a document of this type, it is impossible to address every form of biota which occurs within the affected area. In the case of smaller furbearers, we feel that if the larger, wide-ranging mustelids are provided for, that the less stringent requirements of these common species will be met also.
16. Many thousands of square kilometers of similar forest land currently exist north and south of the proposed expansion. Even after removal of the timber necessary to create ski runs, total acres in the expansion area remaining undisturbed and managed at the 100% level for cavity users and climax-dependent species will far surpass Willamette NF guidelines for maintenance of such species.

17. There are currently five identified bald eagle nests in the Odell Lake area. All five trees containing nests have been tagged and their specific locations have been identified (personnel communication Resource Assistant of the Crescent Ranger District, Deschutes National Forest).

Bald eagle breeding typically involves proximity to a large body of water. Based on the location of Odell Lake with respect to Willamette Pass Ski Area, there should be no adverse effects on their breeding success. Bald eagles in the Odell Lake area are already exposed to a significant amount of human activity.

18. We agree that Pacific silver fir is a major species component in the area. The text has been changed accordingly.

Relative species proportion of the stand are as follows: 1) mountain hemlock, approximately 50%; 2) Pacific silver fir, approximately 30%; 3) associated species (noble fir, Douglas-fir, western white pine, and lodgepole pine), approximately 20%. These proportions are based on timber cruise information from adjacent timber stands in the area.

The major species (mountain hemlock and Pacific silver fir) will have the most significance in determining the value of the timber in this area. The major species in this area as well as all

22. Literature cited in the EIS, page 21, "Federal Resource Natural Areas in Oregon and Washington - A Guide Book for Scientists and Educators," 1972, Pacific NW Forest and Range Experiment Station, Portland, Oregon.

For potential risks and mitigation procedures, see paragraph 1, Willamette Pass Area Sensitive Plants Narrative (Appendix F).

Thank you for your information.

23. Additional information is provided: See paragraphs 2, 3, and 4 in Willamette Pass Area - Sensitive Plants Narrative and paragraphs 2, 4, and 6 in the Willamette Pass Area - Zonal Vegetative Composition Narrative (Appendix F).

24. The current special use permit (covering roughly 400 acres) does not expire with the new Forest Plan. The permit term extends more than one year and will be carried into the next plan. This area is designated as a developed winter sports site. (See description of current management on page 1).

The expansion area is included in the Halden Peak potential winter sports area in the current plan; this entire allocation will be re-evaluated in the Forest planning process now in progress. The 700 acre expansion area will be designated as a developed winter sports site. This area will be included in a new winter sports special use permit covering a total of 1100 acres.

A project-specific environmental impact statement is deemed to be a better forum than the Forest Plan for the determination of specific environmental consequences. Due to its size, the Forest Plan will be more general and not as site-specific as the Willamette Pass EIS on and around the project area.

The responsible official has the option to delay making a final decision until the new Forest Plan is completed. This is essentially the No Change-Phase I Only Alternative (I). The rationale for the final decision is clearly laid out in the Record of Decision.

The only area precluded from other possibilities is the 1100 acre area within the permit boundary.

25. The sentence has been changed to read: "In addition to the Congressional designated areas, a large tract of undeveloped land area (over 36,000 acres) occurs immediately north of the study area."

true firs are considered to be in the white wood classification and they all have a similar market value.

Of the four associated species in the area, Douglas-fir and western white pine have the highest market value. The high value of these two species will not greatly influence total stand value due to the small contribution these two species make to total stand volume.

19. Laminated root rot, caused by *Phellinus weirli* (Portia) is a naturally occurring fungal disease. Infection by laminated root rot is spread primarily by fungal growth from an infected root system or stump to a healthy root system. Depending on several conditions such as root contact frequency and soil conditions (Childs, 1970) the fungus can spread at the rate of two feet per year (Hudfield, Johnson, USDA Forest Service Pacific Northwest Region). Root decomposition, which results from the fungus, either girdles a tree at the root collar or results in the infected tree becoming windthrown due to lack of support (Childs 1970). Therefore, the actual hazard from falling trees that have been killed by the fungus may not be great.

The spread of laminated root rot is limited to the host tissue. The pathogen (see Glossary) can spread only to a limited extent through the soil (Trappe, Li, Lu, Bollen, 1973). Laminated root rot produces great numbers of spores, but it appears unable to establish itself in dead material due to competition with other fungi (Childs, 1970). In addition, very few infections through wounds have been found in hundreds of trees dissected in decay studies (Childs, 1970).

The anthropogenic (of, relating to, or influenced by the impact of man on nature) spread of *Phellinus weirli* is not a possibility since spread within a stand occurs through root contacts between infected and healthy trees.

20. Additional information is provided: See paragraphs 1-4, Willamette Pass Area - Sensitive Plants Narrative, Appendix F. See paragraphs 2, 4, and 6, Willamette Pass Area - Zonal Vegetative Composition Narrative, Appendix F.

21. Additional information is provided for affected vegetation, see Zonal Vegetative, Composition Narrative, Appendix F.

As stated in the EIS on page 21, a preliminary reconnaissance survey of the project area was done. See paragraph 1, Sensitive Plants Narrative, Appendix F for more information.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

26. The cultural resource inventory performed by the District Archaeologist was an adequate inventory. The inventory was designed by a professional archaeologist under guidelines developed by A. William Zukosky, Forest Archaeologist, as outlined in the Willamette National Forest Cultural Resource Inventory Plan 1983. Both academic archaeologists and agency professionals recognize the infeasibility of conducting 100% inventories of a given area in upland forested environments due to: poor ground visibility, rugged terrain, and limited time/budget constraints. Since we know that aboriginal land-use in the Cascade Range was predominantly seasonal and tended to be resource-specific and reliant upon specific micro-environments and ecotones, it is justifiable to design inventory sampling upon the probability of located cultural resources. In this case, the area of the proposed expansion (700 acres) was stratified into high and low probability areas, based on the probability of locating cultural resources. The criteria used for such stratification is based upon our current knowledge of Cascade Range site location, correlated environmental features (springs, slopes less than 20%, confluences of 2 major streams, huckleberry fields, etc.) and known or suspected cultural resources in the specific area. This stratification process resulted in delineating 75 high probability acres out of the 700 total. The actual inventory was designed to incorporate these 75 acres as well as any additional opportunistic sampling as deemed appropriate during actual field survey. This inventory was accomplished in three days, in which a total of 136 acres were actually field inventoried. The results were negative; however, the possibility remains that cultural resources do exist and are as yet undiscovered. Therefore, all undertakings on the Forest require contract clause C6.24# (clause included in Special Use Permit). This clause stipulates that any cultural resources encountered either by Forest Service or contractor's personnel during operations will be immediately reported to each party and an archaeologist shall evaluate the resources. Upon discovery, all ground-disturbing will be halted in the vicinity of the find(s) until such an evaluation is performed. Thus, current legal contract requirements assure compliance and in addition, the District Archaeologist will monitor operations should the expansion be approved.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

27. As stated in the EIS, on page 26, the majority of snow grooming will occur in the early morning hours prior to lift operation. The following discussion relates to effects of noise on nocturnal animals. The relative impacts of noise on nocturnal animals is unknown. It is feasible to speculate, for example, that hunting effectiveness of owls, which depend to some degree on hearing to locate prey, could be reduced. On the other hand, birds such as osprey can nest successfully adjacent to busy highways and Roosevelt elk commonly browse in and around active logging sites. In these cases, animals appear to adjust to human noise, as long as no direct danger becomes evident. As noted in the EIS (page 49), snow campers located in the area marked roaded natural (RN) on map 18 (FEIS) would probably hear the snow-grooming activities. The likelihood of elk disturbance from noise generated by ski area activities during the winter is infinitesimal. Roosevelt elk (which frequent the expansion area in the summer), are occupying their winter range during the time which grooming and lift machinery would be in operation. These areas are located at least eight air miles from Willamette Pass. There will be a period of quiet in the study area from roughly 5:00 PM to 7:00 AM (Sunday, Wednesday, and Thursday); 10:00 PM to 7:00 AM (Friday and Saturday); and all day and night (Monday and Tuesday).
28. If the Waldo Basin is defined as that area which drains into Waldo Lake or that area that is visible from Waldo Lake, then this proposed development is not within this Basin. Visually, the distance is too great (8-10 miles) from Waldo Lake to see any of the activity on Eagle or West Peak. In addition, during the summer months, the area would seldom be in direct sunlight because of the more northerly aspect of the proposed development. The comment inaccurately refers to a "survey of south slope users". The table (shown on page 60a, DEIS) indicates place of residence for Central Cascade skiers. The information was taken from the Master Plan for Hoodoo Ski Bowl, 1978, and was included in Willamette Pass Master Plan. The purpose of the data is to show the different market areas that Hoodoo and Willamette Pass Ski Areas draw on. It does not represent a poll. See response number 85 to Waldo Wilderness Council for additional information.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

29. Fugitive dust from the proposed development is not anticipated as being a nuisance condition in or near the area. Dust reduction through revegetation (discussed in section on air quality effects) of bare soil areas is considered adequate for controlling any potential fugitive dust. Refer to Appendix G and response number 36 to Waldo Wilderness Council for erosion control and revegetation details, as well as short-term effects of erosion on potential revegetation.

As per discussion with R. Johnston, Lane Regional Air Pollution Authority (LRAPA), fugitive dust emissions would be described under Title 32, Emissions Standards, Section 32-005A, dealing with nuisance conditions of air contaminants to the public. Any monitoring of the nuisance conditions from potential development would be handled by LRAPA or DEQ under an Indirect Source Permit. An Indirect Source Permit (described on the EIS on page 28) will be required if more than 500 additional parking spaces are added due to the proposed development. Alternatives IV, V, and VI all qualify for the required Indirect Source Permit which will be monitored by LRAPA or DEQ. Alternatives II and III would not be covered under an Indirect Source Permit due to the proposed parking of less than 500 spaces. Fugitive dust from roads would be the only source to monitor for the nuisance conditions so stated in Title 32 Emissions Standards. Due to the seasonal nature of the potential road dust problems and distance from private property, it is unlikely that the fugitive dust from roads would be considered a nuisance. If a nuisance condition did exist (determined by LRAPA or DEQ), then dust abatement would be accomplished by watering roads.

Refer to Appendix G (erosion control) and response number 33 to Waldo Wilderness Council, regarding costs and effectiveness of revegetation.

30. See Appendix G.

31. Refer to Appendix G regarding required erosion control. Recognizing the difficulty of establishing vegetation in pumice and ash soils, the potential 48 acres of bare soil will not be in one large block but will be distributed over the entire activity area. The irregular shaped slopes are such that soil erosion occurs adjacent to the area where the soil material is deposited. A seasonal review of the erosion control effectiveness will allow an opportunity to identify those bare soil areas and take appropriate action to mitigate the impact.

Erosion and sediment predictive equations designed for cropland were not used to quantify soil loss. At best predictive equations can give relative amounts to compare alternatives. Recognizing the widely known limitations of using cropland soil erosion predictions on forested mountain areas with irregular slopes, it would be impossible to make meaningful predictions of erosion and sediment from bare soil areas of unknown size, shape, slope length, and slope position.

32. The proposed logging system would depend on access and terrain. Slopes under 30% would be tractor logged or skidder logged. Slopes over 30% would have to be skyline yarded or helicopter yarded. Mitigation measures would depend on percent of slope and access; these would be included in the timber sale contract (Clause C6.42). Brush disposal would be accomplished by pile and burning, where feasible by tractor, cable, and helicopter. Where none of these systems work, brush disposal could be accomplished by hand.

The number of entries would depend on the plan of development. If as recommended, Alternative IV is the plan, at least 2 entries would be needed to log ski runs and lift lines associated with the D, E, and G lifts. The actual number and timing of entries will depend on the demonstrated public demand for additional facilities and the permittee's financial capabilities.

33. The responsibility for successful revegetation of ski runs and lift lines rests with the permittee. The 80% figure refers to 80% of the area with 60% effective cover (See Appendix G). This 80% figure will be used as a guideline. We anticipate that successful revegetation of an area can be accomplished in two growing seasons. It is conceivable that delays in construction would occur, although an unexpectedly long delay (2 to 3 growing seasons) is unlikely. The Forest Service is responsible for monitoring the permit's revegetation efforts.

The estimated cost of revegetation ranges from \$260 (Alternative I), to \$11,375 (Alternative VI). This equates to an additional 26 skier visits (Alternative I) and 1,132 skier visits (Alternative VI) needed to break even.

34. Refer to Appendix G regarding erosion control.

35. Refer to Response to Comments from Waldo Wilderness Council regarding sedimentation, and Appendix G for erosion control.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

36. Long-term cumulative impacts or permanent damage from increased sedimentation to Skyline Creek are not expected to occur. The levels of sediment loading from the proposed development are expected to be minimal to none, for the reasons discussed below.

There has not been evidence of excessive levels of stream sediment loading on the south side development. The nature of pumice and ash soils to be highly permeable helps to minimize surface soil erosion. Areas of compacted soils are of high concern for concentrating water runoff such as on permanent roads, skid trails, and temporary roads. North slope construction and timber sale activities may occur over several seasons. Timber sale activity such as tractor yarding, has the potential to expose the greatest amount of bare mineral soils. The lower 40 percent of the proposed north slope runs are estimated as being less than 30 percent slope and having the highest potential for tractor timber yarding. The soil productivity objective will be to minimize the area disturbed (ie. minimize mixing of duff and soil and/or displacement of upper half of the A horizon). Ripping and waterbarring skid trails will be done to minimize surface water runoff.

For mitigating measures, refer to Appendix G concerning erosion control and revegetation.

Wildlife disturbance and displacement over an extended construction period would vary. Displacement of sensitive animals, such as the larger mustelids, could indeed involve a long-term impact. Elk breeding opportunity might well be reduced during construction in the Douglas Horse Pasture areas; the Gold Lake Bog area is better buffered and should not be significantly impacted.

Scientific literature relating specifically to impacts of ski area construction on wildlife is lacking and we can do no better than speculate on many of these questions.

Noise-generating activities for the most part will only have an impact on hikers using the PCNST in the immediate area of the lower proposed D lift terminal. Because there are substantial ridges separating the proposed development from the popular Gold Lake and Rosary Lakes areas, no significant noise impact is expected in these areas.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

It is anticipated that some blasting will be required for construction of lift tower anchors. Also, five days of helicopter use is anticipated for mounting lift towers and for transporting trees from upper ski runs. The noise generated from the helicopter will intermittently impact the above areas as well as the west end of Odell Lake.

37. We acknowledge that the assumption of 5 gallons per day per person of sewage may be low. Based on input from the DEQ, a more appropriate value may be 7.5 gallons per day per person of sewage. Basically, this does not affect the adequacy of the current sewage disposal system. The current system was approved in the Willamette Pass Ski Area Phase One Environmental Assessment, 1983. It was approved for operation by the DEQ in Fall of 1984, and is under operation at this time. Currently, the system is being monitored by the DEQ through the permittee. As was stated in the EIS on page 33, there are certain parameters established by the DEQ for the feasibility and/or design of an on-site sewage disposal system. Since the current sewage disposal system is already approved and operating, the permittee has met all the requirements for the base area.

38. The Summit Lodge as proposed at this time is in concept. Sufficient investment required for adequate sewage facilities (as required and approved by DEQ) will be the responsibility of the permittee. The actual design, location, and other characteristics of the Summit Lodge will be addressed in a separate environmental analysis (if and when skier demand and financial capability of the permittee and evidence of environmental suitability permit this phase of expansion).

39. See response to ODFW for mitigation measures designed to prevent adverse effects.

The factors which would affect the movement of diesel through the soil and ground water and its effect on aquatic resources are discussed below.

- Dry versus wet condition
- Volume of diesel spilled
- Permeability of soil
- Location of ground water system relative to spill
- Other

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

If the conditions are dry, diesel will adhere to the soil particles. The diesel can be readily cleaned up using standard techniques. The highly toxic fraction in the diesel will evaporate.

Under wet conditions, diesel could permeate through the soil. If it enters ground water, the diesel will move at a slightly slower rate through water. Clean up is time-consuming and costly. Diesel in the surface water will affect aquatic resources. Plants covered with diesel may die. If plant roots are not affected by the diesel, the plant may survive, but growth could be stunted; the chances of the plants surviving increases under dry conditions if the toxic fraction has been removed (personal communication, DEQ, Bend and Portland offices).

40. Seasonal permeability changes are expected to be very little on undisturbed areas (areas with non-compacted soil) relative to input rates of snowmelt and precipitation.

Based on precautions and other mitigating measures (described on page 34 of the EIS), there is little chance of direct input of diesel into a water course. See response number 6 to ODFW and number 39 above to Waldo Wilderness Council for seasonal effects.

41. Monitoring for potential water quality impacts due to runoff contamination (see response number 5 to EPA), diesel spills (see response number 6 to ODFW), and sewage effluent (see response number 4 to EPA) on-site will be much more effective than monitoring for similar impacts at Gold Lake Bog located one mile outside the study area boundary. See response number 3 to EPA regarding baseline data.

42. Permit provisions may be enforced by shutdowns and fines as well as cancellation of the permit. Specific contract clauses for enforcement are placed in the special use permit.

43. Fungi production will probably be reduced to some degree in areas where trees are removed for lifts, runs, roads, and lodge construction. Most subterranean fungi, particularly those utilized by big game animals, appear to grow on the forest floor under the canopy.

Most big game excavations for mushrooms on the west slope of the Cascades appear to be the work of blacktailed deer. Other mammals which use subterranean fungi include Townsends chipmunk, red-backed voles, Douglas squirrels, and northern flying squirrels (Maser, Trappe, and Ure, 1978). Big game appear to utilize fungi during the rainy portions of spring and fall.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

Zane Maser (1984, unpublished) notes that the northern flying squirrel and red-backed vole feed almost exclusively on hypogeous fungi. We anticipate that impacts of timber removal for the proposed expansion will be minimal, as most of the area will be left in an undisturbed state. Consequently, overall fungi reduction should be small.

There are three groups of mycorrhizae. Group specification is based on the type of interaction that exists between the fungus and plant root. One group is present on thousands of herbaceous plants (Sallsbury and Ross, 1978). The other two groups are present primarily on conifer and broadleaf plants. There are over 2400 species of mycorrhizae fungi known to be in association with conifers (Spurr and Barnes, 1980). Spores of mycorrhizae may be found above ground from fruiting bodies (mushrooms) or may be found distributed in the upper soil layers.

Areas where mycorrhizal populations have been decreased or eliminated, such as fumigated nursery beds, are reasonably colonized during the first growing season (Manion, 1981). The source of inoculum appears to be from fruiting bodies associated with tree roots around the nursery.

We anticipate that any effect on mycorrhizal fungi will be minimal. There will most likely be a temporary reduction in mycorrhizal fungi in areas that have been cleared of timber until new herbaceous and broadleaf vegetation occupies the area. It is expected that colonization of these areas by mycorrhizae will occur naturally in a relatively short period of time. Therefore, it is unlikely there will be any significant effect on the overall forest itself in relation to mycorrhizal reduction.

44. Nowhere do we imply that Roosevelt elk require roads for use as migration routes. Years of observations on the west slope of the Cascades indicate that elk and deer readily choose to utilize roads as travel routes, contingent upon the frequency of human traffic. Low standard, unsurfaced roads are especially preferred.

45. We agree with the respondents on this comment; however, the construction of Lift E will impact a flat bench which elk currently use for resting and minor browsing in the spring, rather than a migration route as noted above.

46. See response to Comments from United States Environmental Protection Agency, number 13, referring to this matter.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

47. We agree with the respondent's comment. If the lodge and saddle area were used by people to any extent during the summer, we would expect a near total reduction in big game use of the area.

We would point out, however, that Ward's work involved Rocky Mountain elk in the Medicine Bow Range of Wyoming. Years of observations of behavior of Roosevelt elk in the Coast Range and west slope of the Cascades indicate a substantially higher level of tolerance of man's activities than that usually exhibited by the Rocky Mountain subspecies. The fact that the Oregon Department of Fish and Wildlife is faced annually with numerous damage complaints from rural residents and golf courses supports this point.

48. Certainly trapping of fisher is illegal in Oregon. The question here pertains to the potential of incidental catch in traps legally set for marten. Strickland (et al, 1982) states that there is no evidence that any other animal except humans prey extensively upon adult fisher, and that the main mortality factor is trapping.

Fisher and marten share the same habitat and much the same prey base. Both are readily baited and easy to trap. Both will climb trees and most marten sets are placed on tree trunks. Dave Walp, a local trapper, informed the Oregon Department of Fish and Wildlife that in 1980, he caught a fisher in a marten set in Klamath County; fortunately the animal pulled out. In 1981, he noted a marten killed in one of his traps in the Willamette Pass area, apparently by a fisher. (Robart, Gregory P. Wolverline, Fisher, Marten Sightings in Oregon, 1973-1982. Oregon Department of Fish and Wildlife, 1982.)

Conversations with other local trappers indicate a reluctance to risk valuable traps in a situation such as a ski area. Marten sets are visually obvious. The feeling of the trappers is that some percentage of skiers may hold preservationist-oriented emotions, which could lead them to vandalize or destroy their traps.

49. Please refer to Response to Comments from Oregon Department of Fish and Wildlife (response number 10).

50. On the basis of many years of experience by our biologists in big game habitat improvements on the west slope of the Cascades, we feel it is reasonable to assume a positive response by big game animals to a successful seeding of lifts and runs.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

As noted previously, the total reduction of fungi-producing acres is probably minor when compared to the acres remaining undisturbed.

51. As noted in the EIS on page 19, Mr. Donald Utzinger of Portland State University is initiating a study on wolverines. To the best of our knowledge, this is the first scientific study on mustelids proposed for the Central Oregon Cascades. We agree that no baseline has been established because insufficient information exists to do so.

52. The propensity of martens to utilize the edges of both natural and artificial openings has been well documented in the literature (Koehler and Hornocker 1979, Simon 1980; Soutiere 1979, Spencer 1981, Strickland et al 1982). This is predictable, since diversity of prey species is generally greater in the ecotone (see Glossary). Further, Campbell 1979, Hargis and McCullough 1981, Simon 1980, Soutiere 1978, and Spencer 1981, all report use of down logs and slash piles by marten, primarily for foraging sites, winter dens, and under-the-snow travel and access.

53. We feel that on the basis of the above documentation, the points listed in the FEIS on page 39 support the conclusion that the marten is "probably" compatible with the expansion.

54. This table refers to the amount of vegetation removed in the area for runs, roads, parking lots, and structures. The figures reflect vegetation in general and not specifically old growth habitat. The vegetation discussion in the Environmental Consequences section (page 41) mentions the loss of mature timber types.

55. Additional information is provided. See Willamette Pass Area: Sensitive Plants Narrative, Appendix F. See paragraphs 2, 5, and 6 Willamette Pass Area: Zonal Vegetative Composition Narrative, Appendix F.

56. It is true the Forest Service can terminate a lease on the area. The presence of the ski area represents a long-term commitment of the land to a developed facility. Development of a ski area on a site excludes this portion of the land base from other uses. The text has been changed accordingly.

57. It is acknowledged that it is not imperative to have a summit lodge to view Diamond Peak. As stated in the document, a summit lodge would offer scenic views of Diamond Peak.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

58. The classification "roaded natural" relates to opportunities for recreational experiences within the classified area. The sensitivity of Douglas Horse Pasture is not related to its recreational qualities but, rather, to its biological qualities and thus the change in recreational opportunity does not define a notable impact peculiar to that area.

A project-specific environmental impact statement is deemed to be a better forum than the Forest Plan for the determination of effects on and around the project area. See response number 24 to Waldo Wilderness Council.

Analysis supports the conclusion that the visual effects of all alternatives would neither dominate the view from any part of the drainage basin of Waldo lake nor be apparent to the casual viewer in the drainage. Thus no additional consideration of visual effects is warranted.

59. Refer to Response to Comments from Sheila M. Mahan, number 3.

60. Timberline on Mt. Hood and Mt. Bachelor, west of Bend, currently offer summer lift rides. Riders at these areas have the option of returning to the base area by hiking down the mountain on a trail or returning via the lift. The trail provides a safe route down the mountain and protects the fragile environment by keeping the hikers on an established route.

61. The alternatives are evaluated on the basis of the amount of development that will take place at Willamette Pass. Factors which affect ski conditions include the amount of snow, dryness of snow, and the length of its stay. Descriptive words such as "better", "improved", "more", and "higher quality" are used only to demonstrate that snow availability and conditions will directly affect the skiing at the Pass and are not used as favorable objectives, only as favorable ski conditions. The words questioned in the EIS can be defined according to Webster:

Better - (comparative of good) of higher quality

Improved - to make more acceptable or bring nearer some standard; that which is capable of being made better whether it is good or bad.

More - to a greater or higher degree

Higher/quality - of greater degree, size, amount, or content than average / a degree of excellence.

These terms were used to describe subjective snow and skiing conditions and are hard to quantify.

62. As stated in the EIS on page 49, there are no established state noise level standards which apply to the study area and vicinity. The study area is categorized as an industrial/commercial area (DEQ); therefore, there is no one maximum noise level allowable. The following scale measures sound pressure or energy according to international standards.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

SOUND LEVELS AND HUMAN RESPONSE

Common Sounds	Noise Level (dB)	Effect
Carrier deck jet operation	140	Painfully loud.
Air raid siren		
Jet takeoff (200 feet)	120	Maximum vocal effort.
Thunderclap		
Discotheque		
Auto horn (3 feet)		
Pile drivers	110	
Garbage truck	100	
Heavy truck (50 feet)	90	Very annoying
City traffic		Hearing damage (8 hrs)
Alarm clock (2 feet)	80	Annoying
Hair dryer		
Noisy restaurant	70	Telephone use difficult
Freeway traffic		
Man's voice (3 feet)		
Air conditioning unit (20 feet)	60	Intrusive
Light auto traffic (100 feet)	50	Quiet
Living room		
Bedroom	40	
Quiet office		
Library	30	Very quiet
Soft whisper (15 feet)		
Broadcasting studio	20	
	10	Just audible
	0	Hearing begins

This decibel (dB) table compares some common sounds and shows how they rank in potential harm to hearing. Note that 70 dB is the point at which noise begins to harm hearing. To the ear, each 10 dB increase seems twice as loud.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

63. We appreciate your additional example concerning this matter. The example presented in the EIS on page 49 was provided by the DEQ and still holds to be valid.
64. Several views from different locations in the Gold Lake area were analyzed. Because all views were basically the same, the view from Gold Lake included in the FEIS was selected as typical or representative of all views that were analyzed.
- The visual impacts shown in Figure 2 model the effects of building Lift F and associated runs as proposed in Alternatives V and VI. Under the Preferred Alternative, IV, there would be no change in the visual quality as seen from or around Gold Lake.
65. The proposed development site is not visible from Waldo Lake due to: 1) distance (8-10 miles), 2) lighting and shadows on north-facing slopes of Eagle and Wet Peaks, and 3) intervening ridgelines (from Twin Peaks and Mt. Ray) that block out Eagle Peak and Wet Peaks as one proceeds south on Waldo Lake. Also, the Waldo Lake Trail on the west side of the lake is in the timber. Visual contact with the proposed ski area would be nil because of the trees and the intervening ridgelines of Mt. Ray.
66. The models as presented from these viewpoints take into consideration the openings that are visible on Eagle Peak and West Peak. In order to try and get some variation of the timber stand, various tree heights were used in the models. Four types were used as follows: dominants, 100 feet; co-dominants, 65 feet; intermediates, 40 feet; and for suppressed trees, 10 feet (see Glossary).
- Trees were not evenly spaced on the models in the EIS but were placed according to the random selection of the program.
67. Because the selected alternative does not consider any development in areas visible from Mt. Ray or Mt. Fuji, visual quality from these viewpoints will not change. The visual quality objectives from Maiden Peak are projected to change. Due to the viewing distance (2.5 miles) and the limited use that Maiden Peak gets (relative to other areas), the view of the proposed ski area was considered acceptable.
68. The capacity as stated in the EIS on page 51 is up to 1,530 (not 3850) cars per day.

Refer to Response to Comments from Peter Bolander, number 5.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

69. This figure was obtained from the Willamette Pass Master Plan which is available for review at: 1) Willamette Pass Ski Area; 2) Oakridge Ranger District; 3) USDA Forest Service Supervisor's Office in Eugene.

70. Mitigation mentioned is for parking, not for road costs or accidents.

71. This sentence has been changed to read as follows: "To date, well water is of high quality and is in sufficient abundance to meet the community needs; no shortages are anticipated."

72. The survey was conducted in 1983 by a University of Oregon class taught by Professor Ed Weeks and Professor Mike Hibbard. A random survey of Oakridge residents (identified through the telephone book) were asked their opinions on and perceptions of several issues facing their community. One hundred sixty-five responses were returned. A copy of the questionnaire and a tabulation of the responses to each question are available in the Eugene (forest planning records) Supervisor's Office.

73. Several supportive letters (unpublished) were received during our scoping activities. Letters received in response to the DEIS from local governments are published in the FEIS. Lane Council of Governments wrote in support of Alternative IV. The mayor of Eugene, Brian Obie, wrote in favor of north slope ski facilities. The Springfield Chamber of Commerce responded in support of the proposed expansion of Willamette Pass Ski area. The Oakridge City Council endorsed Alternative VI, and the Florence Area Chamber of Commerce responded in support of the expansion program at Willamette Pass.

74. The figures presented are based on the actual number of employees at Willamette Pass Ski Area. A standard multiplier was not necessary since the actual number of seasonally employed persons was known. Length of employment will fluctuate based on winter and/or summer use at the ski area. Wage information may be obtained from Willamette Pass Ski Area.

75. The 72% increase in total overnight visitor use since 1981 includes increases in winter as well as spring, summer, and fall occupancy. Crescent Lake Junction resorts have experienced a substantial increase in summer use over the last three years. Weekend winter use at resorts located near cross country skiing and snowmobile areas (Odell and Crescent Lake) has also increased.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

76. As stated in the EIS on page 55, the study will be conducted by a qualified independent party and will follow established guidelines. The study will be conducted at the permittee's expense. The public will have an opportunity to comment.

77. The value of 3 was offered by Professor Povey (personal communication) as a conservative estimate (in comparison with other construction projects). The purpose of the multiplier is to show relative estimates of secondary revenue generated by each alternative. The dollar values shown are estimates.

78. The economic impacts on Hoodoo and Bachelor are discussed in terms of use or skier visits (see section in FEIS on page 57).

No losses in hunting, fishing, or recreation visits are anticipated.

Fur trapper yields are not expected to decrease. (See section describing effects on wildlife, pages 36-39).

Effects on wildlife, threatened and endangered plant species, and species habitats are discussed in the FEIS, pages 36-39, and 41. See risk analysis and Wildlife Assessment in Appendix C.

See description of Gold Lake Dog Research Natural Area in text on page 21 and in Appendix F. Additional information is available in the analysis file at the Oakridge Ranger District.

Maintenance costs on Highway 58 will not be affected; the cost to plow and sand the road are independent of the number of vehicles using it. (Oregon Highway Department, personal communication).

See response to 94 for effects on law enforcement services.

State and regional studies indicate that demand for alpine skiing will increase significantly in the next 15 years (SCORP, 1975 in River Basin Commission Report). The Urban Planning Study (University of Oregon, 1985) predicts a 7.2% increase at Willamette Pass Ski Area for each five year interval from 1985 to 2000. If past trends are used to predict future demands, skier visits can be expected to increase 20% per year in the Central Cascades and 15% per year in Oregon. The demand projections in Appendix D take into consideration the inflation or lessening of demands by providing a low range in projection.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

79. See response to number 77 for discussion of multipliers. The sectors of the economy (aggregated into broad categories) that expect to receive expenditures from the skiing public and the percentage of the total expenditure expected to be received are listed below:

	Percentages
Food & Drink:	
Purchased meals	15.9
Grocery related	4.1
Clothing	3.8
Transportation/communications	4.9
Lodging	19.4
Recreation	35.9
Government	.3
Wholesale	5.2
Retail	7.7
Other Services	2.8

	100.0

Source: Implan Data Base for Forest Plan; Early Winters Ski Area Analysis in Okanogan County, Washington.

Secondary revenue from construction dollars will go to businesses in the wood products, engineering, and construction industries. We assume that the average annual expenditures (\$15) per downhill skier visit will remain constant for the calculations. Factors such as lift ticket increases, advances in equipment, technology, revenue from nordio skiing, inflation, etc. were not considered. The calculations show the relative effects on the economic environment by alternatives; the dollar values indicated in Table IV-13 are estimates. See section entitled Public Demand for Skiing at Willamette Pass page 58 for discussion on projected skier numbers.

80. See Responses to Waldo Wilderness Council Comments, number 18.

The value of \$150 per thousand board feet came from an adjacent timber sale in the area. Over the past seven years, the market value for white woods has ranged from \$18 to \$323 per thousand board feet. At this date, market value of white woods is approximately \$50 per thousand board feet. The text has been changed accordingly. Market value is equivalent to the price a purchaser will pay for timber after he's paid his logging costs and includes a profit).

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

Based on cruise data from adjacent stands, defect in the area is running from 20-25%. The text has been changed accordingly. Logging costs (stump to truck) are estimated to be approximately \$180 per thousand board feet. This figure is based on 60% of the area logged with a helicopter and the remaining 40% logged with a skyline and/or ground-based system.

Estimated net volume per acre base on cruise data from adjacent stands ranges from 25-30 thousand board feet per acre. Twenty-five thousand board feet per acre will be used in this analysis. The text has been changed accordingly.

81. These considerations have been included in the sections describing Effects on Hoodoo and Mt. Bachelor Ski Areas and Public Demand for Skiing at Willamette Pass, pages 57 and 58.

82. The text clearly states on page 59 that the public demand projections are for skiing at Willamette Pass Ski Area. See discussion of the site attraction multiplier in Appendix D.

83. We agree that data for one year do not indicate a trend. The recent development at Willamette Pass has resulted in increases in skier visits over the last 3 years. Similar shifts in skier visits from "less" developed to "more" developed ski areas over the last 20 years are noted in the text. Unfortunately, long-term trends are not available for Willamette Pass Ski Area at the present level of development.

The demand projections provide a range of projected skier visits for 1985 through 2000. They serve as a guideline in the planning process to assess the public's desire to participate in downhill skiing. The figures do not represent a statistical model for actual future use.

Your reference to "complimentary tickets" in the baseline data is unclear. The text refers to approximately 50,000 skier visits for the 1983-84 season. The actual number of skier visits was 49,972. The difference (28 skier visits) is due to rounding.

The break-even calculations are based in the number of paid skier visits.

84. As stated in your comment number 83, "The data for one year do not indicate a trend." The section entitled Effects on Hoodoo and Mt. Bachelor ski areas describes several shifts in skier visits from Willamette Pass to Hoodoo to Bachelor over the last 20 years.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

Bachelor and Hoodoo Ski Area view the recent and proposed expansion of Willamette Pass Ski Area as healthy competition (personal communication Mt. Bachelor, Inc. and Hoodoo Ski Bowl; also see letter from Ted Scharpf, Hoodoo stockholder). All three areas have experienced substantial increases in skier visits during the 1984-85 winter season.

85. The 1978 survey sponsored by the Hoodoo Ski Bowl was designed to examine attitudes of skiers at the three major ski areas in the Central Cascades: Bachelor, Hoodoo, and Willamette Pass. Researchers for the University of Oregon who conducted the survey visited each ski area on a representative weekend day. At Hoodoo and Bachelor ski areas, every fifth skier received a voucher which entitled them to enter a contest to win a pair of skis. If they completed a survey form. Due to the low attendance at Willamette Pass Ski Area, every skier received a voucher; the researchers left additional survey forms to be handed out at a later time. The 56 people who responded represented 1.0% of the 7500 skier visits for the 1977-78 season at Willamette Pass.

The proportion of responses from the Willamette Pass Ski Area was actually higher than for Bachelor or Hoodoo Ski Areas (Povey, personal communication).

A 1984 survey conducted by Willamette Pass Ski Corporation also verified the 1978 survey results: over 80% of the skiers at Willamette Pass came from Lane County. The vast majority being from the Eugene/Springfield area. Recent market studies indicate that 15% of Hoodoo skier visits and approximately 8% of Bachelor skier visits come from Lane County (Hoodoo Ski Bowl and Mt. Bachelor Inc., personal communication).

86. A comparison of projected skier visits (based on demand) to skier visits needed to break even (Table IV-19, page 60b) suggests that all alternatives have the ability to break even. See Willamette Pass Ski Corporation letter (addressed to C. Frisch) in regard to the question of sound business judgment.

87. Method II demand projections have been recalculated using a site attraction multiplier based on actual skier use at Bachelor, Hoodoo, and Willamette Pass during February 1984, and 1985 (see Appendix D). Based on these calculations, all alternatives break-even (see Table IV-19, page 60b).

88. See section entitled General Effects on the Economy by Alternatives. No declines in other forms of recreation are anticipated (see response to number 78 above).

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

89. Most sectors of the economy affected by the Willamette Pass Ski Area operation and potential expansion occur in Lane or adjacent counties. For example, approximately 98% of the amount of money spent for downhill skiing by recreationists impacts sectors which occur in Lane County (see list of sectors in response number 79 above). Many local businesses stated that the expansion of Phase I had helped their business (see letter, Schaudt, Stemm, and Wild, Inc.). It seems reasonable to assume that a good proportion of the products and services will be purchased locally. In reality, the likelihood of the financial returns being recirculated within the Lane County Area depends on numerous factors such as price, product availability, transportation costs, etc.

90. Refer to Response to Comments from Waldo Wilderness Council, numbers 18 and 80.

91. The summary of the EIS is in the front of the document. This section was included to assist the reader.

To find specific areas of concern refer to the table of contents or the index.

92. At public meetings and field trips to the proposed expansion area, cross-country skiers, and other concerned users of the area had the opportunity to ask questions and give us their recommendations on the proposed alternatives. It is estimated from cross-country registers and ski observations that 200 people during the 1983-84 season skied the PCNST route that passes where the proposed bottom terminal of D chairlift is located.

Refer to Response to Comments from Peter Bolander, number 2 and summer use, page 22 of the EIS in response to the second half of your question.

93. The colder climate due to higher elevations on the north side will provide for greater snow depth and dryer/colder snow. Also, there would be a reduction of the icy conditions which occur from the melting and re-freezing of snowpack. Development of the north slopes will open up intermediate terrain at higher elevations. Intermediate terrain at higher elevations is currently limited to one ski run. This ski run is the most congested run on the mountain.

94. Refer to Response to Comments from Denise G. Fjordbeck, number 23.

95. Refer to letters from Schaudt, Stemm and Wild, Inc., Bradley C. Stewart, Skele's Jewelers, Inc., and Home Fabrics.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

96. Surveys indicate that day use ski area in Oregon and Washington commonly draw from a primary market area within an 80-100 mile radius of the ski area. Povey (personal communication) hypothesizes that skiers who intend to ski two days (Saturday and Sunday) prefer to spend the night rather than drive the 3-4 hours per day round trip. Overnight use in the Crescent Lake Junction area supports this hypothesis; resorts are generally booked months in advance for winter weekends.

The \$500,000 generated by overnight visitors includes income from year-round occupancy. The data was taken from An Analysis of the Current Potential Demand for Overnight Accommodations in the Willamette Pass Recreation Area, 1985, and is available for review at the Oakridge Ranger District and the Bureau of Governmental Research and Service Library at the University of Oregon.

97. We appreciate your information concerning this matter. The text has been changed accordingly.

98. We agree with your point regarding the general impacts of cumulative effects, but we don't feel that it applies in this case. The potential environmental effects associated with ski area expansion are site-specific.

As noted previously, the Willamette Pass Ski Area is surrounded by hundreds of thousands of acres of land classified as Wilderness which will remain in a natural state or land currently allocated to a non-commercial forest status.

Land allocations may change in the future depending on the results of the current forest planning process for the Deschutes and Willamette National Forests. The forest plans will consider habitat requirements for a range of species on a site-specific and cumulative basis. The appropriate arena to discuss this issue is in the Forest Plans.

99. The saddle could be a travelway for wolverine as well as big game. Since wolverine movements are apparently oriented to big game herds as a source of carrion, any area of importance to large ungulates could also be significant to wolverine. Deer and elk use the saddle from spring into fall, and any carcass deposited into the system during that time might be utilized by wolverine. If such deposition occurred late in the season, the carcass could be covered with snow and used during the winter. As noted in the Wildlife Assessment Risk Analysis and Environmental Consequences, (page 37) development of the north side will probably result in reduced use of the expansion area, if in fact the wolverine currently uses it. The same would be expected of the saddle between Eagle and West Peaks.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

100. Documentation is available (from Bill Dugas, District Biologist, Oakridge R.D.) for statements in the risk analysis which are not general knowledge. Range estimates which may appear contradictory simply reflect seasonal variations and home range overlap of wolverines observed by Hornocker and Iash (1981). We do not agree that information shown is inadequate or that assumptions made are invalid. We do not ignore the fact that certain portions of habitat may be more important than others; in fact, we emphasize this in the case of Douglas Horse Pasture and Gold Lake Bog. We state unequivocally that wolverine use of Douglas Horse Pasture could be impacted during the winter.

We also state that more than one wolverine could currently utilize the Gold Lake/Waldo Basin area due to reduced winter ranges, overlapping home ranges, and low rate of intra-specific conflict. We still believe that a rational decision can be made based on current knowledge. Although neither of the biologists on the risk analysis team are recognized wolverine experts, they are knowledgeable of wildlife populations and habitats of the Western Oregon Cascades. Mr. Greer has 10 years in this capacity for Oregon Department of Fish and Wildlife, and Mr. Dugas has spent 15 years as a habitat biologist for the Uapqua and Willamette National Forests. They drew on their experience and a review of scientific literature in the formulation of the risk analysis, and we consider their inventory and analysis of the available knowledge to be sound and defensible.

101. Thank you for your information regarding wolverine reproduction. We remain somewhat skeptical regarding 10 square mile home ranges. The use of radio-tracking techniques employed by more recent researchers provides a different picture. Hornocker and Iash (1981) cite average yearly ranges of 162 square miles for male wolverines and 149 square miles for females. They state that two lactating females exhibited greatly reduced spring ranges of 38 square miles each, and that average wolverine winter ranges were about 60 square miles, the figure used in the risk analysis. At the other end of the spectrum, Krott (1959) reported yearly ranges of male wolverines in Sweden to exceed 700 square miles, with female ranges approaching 200 square miles.

We agree, as noted in the risk analysis, that observations since 1960 indicate that the highest concentration of wolverines in Oregon appears to be in the Central Cascades. Most of our known sightings occur within 200 feet of the 5000 foot contour. We have a copy of Mr. Robert's publication.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

102. Overall knowledge of the wolverine and its requirements is very sketchy relative to many other species. In the case of the proposed expansion, the risk analysis team weighed the potential of negative impacts against the current state-of-knowledge regarding the wolverine. The risk analysis indicated that the scope of negative impacts to the species outside of the immediate expansion area was relatively slight. Consequently, the team concluded that a rational decision could be made based on current knowledge.

103. The planning team did not make this statement. This was the estimate of two professional wildlife biologists with combined experience exceeding 25 years. We are confident that they have studied a sufficient number of graduate theses in that time to render their judgment adequate on this point.

104. See response number 102 to Waldo Wilderness Council comments.

105. Recent records indicate substantial use of the Gold Lake area by wolverine, despite current levels of winter recreation, including snowmobiling on the Waldo Road. Since use continues at Gold Lake, we fail to see why wolverine use of Douglas Horse Pasture would require protection from the recreational use of Gold Lake.

106. Summer maintenance will be intermittent with most activity occurring on the top drive terminals of the proposed lifts (which will be accessed from the south side).

At present, the PCNST parallels Douglas Horse Pasture meadow for about one quarter of a mile. South of there, the trail passes directly through two smaller meadows. Passage of hikers in the summer would almost certainly move wolverines out of the area.

Re-routing the PCNST will reduce human impact to wildlife in the summer as well as reducing further damage of the meadows by summer hikers and livestock.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

Although we consider the likelihood of some impact on winter wolverine use of Douglas Horse pasture to be substantial, these impacts are probably not inevitable. During the winter, downhill skiers will be restricted by the catchline road. Disruption of wolverines using Douglas Horse Pasture would be the result of noise from lifts and grooming machinery. The base of the closest lift is 2300 feet from Douglas Horse Pasture. The catchline road at its nearest point is 1300 feet away. Because of the distances involved, normal maintenance of ski facilities in the expansion areas should have little or no impact on wolverines if they were, in fact, using the Horse Pasture.

107. Alternative II indeed involves less impact to wildlife and their habitats than the preferred alternative; however, as stated in the Record of Decision, Alternative IV best meets the needs of a broader spectrum of factors and resources than any of the other alternatives.

108. Citations in scientific literature pertaining to management of wolverine habitat and mitigation of impacts to wolverine habitat are most notable by their absence. Consequently, any mitigation proposed for wolverines will be purely speculative. Probably the best management for wolverines is no management at all (Strickland, et al 1982). Failing that, the best course might be to balance a probable increase in prey base against the potential disruptive effect of the management practice proposed. Hornocker and Hash (1981) assert that habitat manipulations which increase herbivore and small mammal populations, and thus increase the food supply for primary predators whose kills provide carrion sources for wolverines could be beneficial. This point is qualified by the extent and design of the manipulation with respect to wolverine ecology. In Montana, the basins, southerly and easterly slopes, edges, and ecotones were described as preferred, and ideally should be left intact. If these areas are avoided and created openings are designed to encourage big game, then some benefit may be realized for wolverines.

Possibly the most direct mitigation might be an artificial human-caused increase in the wolverine's food supply. Strickland, (et al, 1982) noted that many trappers distribute carcasses of beaver as food for fisher to increase the carrying capacity of their range. Theoretically, it appears this technique could work for wolverines. Carcasses of road-killed big game or domestic herbivores could be placed in areas known to be frequented by wolverines. Although back-country recreationists might object to the aesthetics of this practice, it seems likely that wolverines would respond positively (Hornocker, personal communication).

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

109. The demand calculations in Appendix D are based solely on the data provided by the Center for Population Research and Census, Portland State University.

110. The historic record suggests that snow conditions will be marginal to sufficient in the base area one out of every three to five seasons.

During poor snow years, several options are available to the permittee: continue to groom base area and if necessary, transport snow to areas that are bare; make snow; operate the A chairlift from mid-station to summit and D and E chairlifts on north slopes only; or close area for portion of the season. (See Willamette Pass Ski Corporation letter, comment number 1).

Use figures indicate that during poor snow years, skier visitors at the higher elevation resorts (Bachelor, Mt. Hood Meadows, Timberline, etc.) increase whereas visits at lower elevation resorts (Hoodoo, Multipor, Ski Bowl, Summit, Willamette Pass, etc.) decrease.

111. The demand projections have been recalculated using a site attraction multiplier based on actual skier use at Bachelor, Hoodoo, and Willamette Pass Ski Areas during February 1984 and 1985. See Appendix D, Method II.

112. The Method II calculations were changed to include a site attraction multiplier similar to Method I. See Appendix D.

Poor snow years are discussed in response number 110.

113. See response to number 111.

114. The term "fixed" costs has been changed to "budgeted". Items in this column relate to amounts projected under full development. The permittee is able to estimate dollar values for these items independent of the number of skier visits (see comment 4, Willamette Pass Ski Corporation letter).

115. The figures used in the break-even analysis are available at the Oakridge Ranger District or contact the Willamette Pass Ski Corporation.

RESPONSE TO COMMENTS FROM WALDO WILDERNESS COUNCIL, CONT.

116. Based on experiences in Oregon and Washington, ski areas of this size continue to provide public service despite economic difficulties. The special use permit (Clause 12) states:

"upon abandonment, termination, revocation, or cancellation of this permit, the permittee shall remove within a reasonable time all structures and improvements except those owned by the United States, and shall restore the site, unless otherwise agreed upon in writing or in this permit. If the permittee fails to remove all such structures or improvements within a reasonable period, they shall become the property of the United States, but that will not relieve the permittee of liability for the cost of their removal and the restoration of the site."

117. Additional information on bld specifications for the different configuration and costs for individual lifts is available from the Willamette Pass Ski Corporation (see comment 5 in response to the letter).

118. See comment 3, Willamette Pass Ski Corporation letter.

119. The break-even analysis, based on information and assumptions provided by the Willamette Pass Ski Corporation, estimates that the ski season will last 120 days. As stated in the EIS, page 16, generally, there has been adequate snow for skiing at Willamette Pass from mid-December through March--or for approximately 110 days. The permittee has considered and planned for the likelihood of poor snow years. In their economic analysis (see comment 1, Willamette Pass Ski Corporation letter), poor snow years are discussed in response number 10, above).

120. For the purposes of the break even calculations, it is assumed that increased skier visits will require a corresponding increase in the number of employees and hence labor costs. The 15% increase in installation and maintenance costs is associated with Alternative IVC only. This alternative is similar to Alternative IV, but eliminates the catchline road and Summit Lodge resulting in increased installation and maintenance costs.

121. The purpose of the break-even analysis in Appendix E is to evaluate the economic viability of the proposed expansion alternatives. It is not designed to assess economic gains or losses to regional, state, and federal treasuries.

RESPONSE TO COMMENTS FROM HALDO WILDERNESS COUNCIL, CONT.

The economic effects on Hoodoo and Bachelor Ski Areas are discussed in terms of skier visits in the text on page 57. No major reductions in skier visits at Hoodoo are anticipated. Returns to the state, regional, and federal treasuries from special use permit fees and taxes are expected to stay fairly constant on a forest and regional basis (R. Ullrich, personal communication).



March 22, 1985

Conny Frisch
Oakridge Ranger Station
46375 Hwy. 58
Westfir, OR 97492

Dear Conny:

In regard to criticism of the DEIS the only two points that continue to be brought up evolve around the concept of possible bad snow years and the financial ability of the Corporation to be profitable. Both of these concerns, along with many others that are market related, are continually on our mind and dealt with on a daily basis. They are what contribute to the fact that we are in the "ski business." In fact, this is why many would not want to trade places with us! We use all the information available to us to constantly make "sound business decisions" for the furtherance of our company and the service it makes available to the public. By all means we are not embarrassed by our short history and our future directions and would be happy to defend any of our positions.

Three years out of the past 45 recorded winters have been lacking enough snow to ski on. That's one in every 15 years. All of these have been in the recent past and this trend could continue. We realize this, live with it and plan for it. If and when a year arrives that doesn't allow for skiing we will be disappointed, as skiers will too, but it will have a minimal effect upon our business. Our organization is completely internal and carrying cost could be reduced to nil during a bad year--we are designed in such a way that we could "hibernate" if needed, and be ready to bounce back even stronger! There is no further argument on this point--we "own" our "assets."

We have a unique situation in the middle of Oregon that does not exist in many ski markets and that is that our overlap is quite small. Willamette Pass and Hoodoo are comparable ski areas in characteristics--day areas, middle Cascades, etc. However, the only market we share is Eugene.

29 W 27th, #5, EUGENE, OREGON 97405

Phone: (503) 455-5030

Hoodoo draws from the North of Eugene; we draw to the South. Skier visits have risen over the years in Oregon; Hoodoo's have declined for years. Willamette Pass should not be blamed for their recent declines, in fact, Hoodoo and Willamette Pass are both experiencing excellent growth this year. The public should thank Willamette Pass for encouraging Hoodoo to offer better services. Supply and demand for skiing has "not" even been tapped yet. Management on the other hand has been awakened to the skier's needs.

Is our sport or our facility a novelty? Willamette Pass started in the 40's, so did skiing. Guests in the 80's have high demands and expectations of resorts. After a review of our previous breakeven model we are still satisfied that it projects an accurate picture of development that could take place in regard to the approval of Alternative IV. Likewise, items within this model would be used to analyze any one phase of development. The model is set up to take place over 3 years. However, it must be understood that most improvement would be put in place as a function of actual skier demand, perceived market and the ability to maintain our current financing posture. All of the above are very important to consider in order to understand the projections. If any one improvement is not made for a period of time the corresponding year could be considerably less. Likewise, if need be, our internal carrying cost can be deferred due to the fact we borrow from ourselves; this also lowers our breakeven. In essence, if we wished to go through all points it would become apparent that we control both sides of most variables.

There is a mistake in the term "fixed cost" in the DEIS with regard to Appendix E. This is an incorrect use of the term. It should read "budgeted costs." All items in this column relate to amounts projected under full Alternative IV development. We are able to put dollar values to these items regardless of numbers of guests served. The next items listed under variable cost are costs that vary with the number of guests we serve. Another mistake is in item #2 under "to calculate the breakeven" the word "installing" should not be present in this sentence. The facts and numbers are available to back up the \$500,000 figure of future lift costs. Bid specifications are available stating the different configurations and costs for any individual lift.

This should clarify any misunderstandings regarding our breakeven numbers. Willamette Pass Ski Corporation feels comfortable that it is currently in a position that allows it the ability to control its position.

Sincerely,

Charles Kiper III
President



March 22, 1985

Mike Kerrick, Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, OR 97440

Dear Mike:

Willamette Pass Ski Corporation has reviewed the DEIS on our proposed expansion and has found the body of the text to be acceptable. We commend the United States Forest Service in its efforts to allow for the furtherance of this recreational area, and are positive that the final EIS will reflect a correct and sound decision. Any errors that we have noticed in the DEIS that have been publicly criticized will be easily corrected for the final, since the basis for criticism generally is in regard to the spelling or wording of statements and the clarification of the meanings. Many statements have been manipulated out of context for reason of argument. Hard facts, on the other hand, have continued to be strengthened through the process.

Willamette Pass Ski Corporation is prepared to support and approve the Alternative IV that is currently written. In the near future this should allow for the necessary expansion to meet the skiing public's needs in both Cross Country and Alpine. However, we would like to advise the United States Forest Service to proceed with caution if further compromises are to be considered for the final EIS and the decision. Willamette Pass Ski Corporation has made many compromises over the course of this process, the most important one being the "time" lost and its effects on our business. Other compromises include one less lift, top drives, no north side fuel transport or storage, no alpine slide, no lodging considered, etc. Given these facts we would be very displeased if any other restrictions were implemented that could jeopardize our backing and agreement with the final decision handed down. That would be a catastrophic loss.

Hoping for a reassuring decision soon.

Charles Wipef
Charles Wipef III
President

cc: Connie Frisch, United States Forest Service
29 W. 29th, #5, EUGENE, OREGON 97405

Phone: (503) 484-5030

3-25-85

RESPONSE TO COMMENTS FROM WILLAMETTE PASS SKI CORPORATION 3/22/85

1. This information has been incorporated into the text.
2. This information is included in discussion of the effects in Hoodoo and Mt. Bachelor Ski Areas on pages 57 and 58.
3. This information is included in section on Economic Consequences on page 61.
4. The term "fixed cost" has been changed to "budgeted costs" in Appendix E.
5. The word "installing" has been removed in Appendix E.

1-30-85 CC sent in by
"CC" 1-30-85

Mr. Kernick —

As a long time resident of the Willamette Valley I am encouraging you to consider the development of Willamette Pass Ski area.

My childhood was spent in the area no in consideration. I spent many winters at the ski area itself and many summer in the surrounding wilderness area. It has always given me great pride to visit this area year after year and still see that it is kept very much the same as I remember it to be.

But over the years the popularity of winter sports has grown immensely. And thus, so has the demand for an adequate Winter resort with proximity to the Valley.

The development of this area has been fought for many years. Perhaps, rightfully so. But now there is a great deal of demand for such an area. Before it was a matter of debate

whether the ski area could feasibly exist of have the economic demand to exist. But now we know that there is such a demand. And I for one feel much better spending my money in my own community, rather than in the Bend or Portland areas.

The proposed opening of the North Ridge would open some of the finest skiing in the state. And would greatly add to already enjoyable resort.

Please consider the expansion plan. There is room enough for all of us to enjoy year round.

Thank you.

Matthew

Annie

RESPONSE TO COMMENTS FROM MATTHEW ARNIS

1. The development of Phase I facilities in 1982 resulted in significant increase in the number of skier visits at Willamette Pass Ski Area.

Dear Michael Kerrich,

Wednesday 2/27/85

I'm both an alpine skier at Willamette Pass Ski Area (WPSA) and a nordic skier throughout the cascades including the Maclaren Peak area. I'm against the expansion of WPSA as proposed in Alternative 4 but would support the expansion proposed in Alternative 2.

The WPSA is being too hasty in their decision to expand. They have been in business for just a few years. These years have been exceptionally good for snowfall, snow conditions, ⁽¹⁾ weather conditions, etc. I would hate to have them sink in lots of money to expand only to be hit with several snow-skinny years or the unstable economy and we'd be left with a rusting abandoned ski area.

Expansion could be unprofitable in other ways. Most likely WPSA would increase lift ticket prices to compensate for the ⁽²⁾ expansion. If for example the tickets became \$15 or \$16 people may decide to ski at less expensive Hoback or ski at Mt. Bachelor which would be just a few dollars more with a much greater area.

Most importantly I oppose further destruction of our ever diminishing wilderness areas as well as habitat for many endangered and rare species such as wolverine, cougar, Martin and fisher. I'm also concerned about the potential water ⁽³⁾ pollution problems from diesel spills, erosion and sewage run-off which could eventually seep into Gold Lake Bay, Alkali Lake and Salt Creek.

3-1-85 cc sent to Nakridge
3-1-85 cc mailed in 50

Alternative 2 or the other hand would allow a 2/3 increase in skiers without destroying one acre of wilderness. It would be less expensive and less risky financially. Please join me in supporting Alternative 2.

Sincerely,

Audrey Bergsma
653 W. Broadway
Eugene, OR.
97402

RESPONSE TO COMMENTS FROM AUDREY BERGSHA

1. See comments from Willamette Pass Ski Corporation
2. A large increase in lift ticket prices would probably impact the number of skier visits to Willamette Pass Ski Area. Management of a ski area (package deals, ticket prices, marketing, etc.) plays an important role in attracting skier visits. For example, Hoodoo Ski Bowl lowered its lift ticket prices from \$14.00 to \$10.50 for the 1984-85 season; skier visits increased by an estimated 63% (see discussion on Effects on Hoodoo and Mt. Bachelor Ski Areas on page 57).
3. See discussion of 1) mitigation measures to prevent potential diesel spills in response number 6 to Oregon Department of Fish and Wildlife, 2) erosion in Appendix G and response number 36 to Waldo Wilderness Council and 3) sewage runoff in response number 4 to U.S. Environmental Protection Agency.

February 9, 1985

Michael A. Herrick
Forest Supervisor
Millumette National Forest
P.O. Box 10607
Eugene, Oregon 97440

Dear Sir,

I have reviewed the Millumette Pass Alpine Winter Sports
Site Draft Environmental Impact Statement. I support the recommended
expansion #1.

My concern is in regard to the extra traffic that highway 58
would be carrying. This state highway is in such a bad condition that
it does not safely carry the traffic now.

Sincerely,
Faye L. Bidleman
Faye L. Bidleman
47702 N. 1st St.
Oakridge, OR 97463

1

RESPONSE TO COMMENTS FROM FAYE L. BIDLAMAN

1. Refer to Response to Comments from Peter Bolander, number 5.

3-12-85 CC sent bidleman
"Hailed in SD"

1-18-95
CC
1000

January 4, 1985
Willamette-Nell Forest

PO Box 10607

Eugene, Or. 97440

Dear U.S. Forest Service:

I am writing to express a note on the ^{RECEIVED} Willamette Pass Ski Corp proposal to expand their ski area to the north slope of Eagle Peak. I am a skier country and downhill skier and I like the Pacific Crest Trail in the summer.

This proposal should be approved with ruin the natural beauty of the Willamette Pass area. The north side of the mountain is beautiful and quiet and a pleasure to ski through when you want to get away from the hubbub of the downhill slopes. Wildlife abounds there as evidenced by the number of animal tracks I've seen in the snow.

The thought of taking the trail or going to Wildo Lake in the winter and seeing the north mountain-side barren where Chair Lifts have been pinned is awful. And I dread to see the gravel pit on the south side of Hwy 58 torn up for an expanded parking lot and worse yet a "pedestrian bridge" in the middle of beautiful forest land.

Please think hard before you advocate this

this proposal. We don't need to rip up more forest land. And before you decide, send a couple of your staff to cross country ski the north face of Eagle Peak and check out its beauty and naturalness.

Please keep Willamette Pass Ski Corp. on the south face of Eagle Peak.

Thank you,

Sheryl Blotter

671 W 23rd

Eugene, Or 97405

RESPONSE TO COMMENTS FROM SHERRY DLOKER

1. Refer to Response to Comments from Waldo Wilderness Council, numbers 28 and 65 regarding visuals.

P.O. Box 682
Oakridge, Oregon 97463
(503) 782-4425
March 1 1985

Michael A. Kerrick, Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97440

Dear Mr. Kerrick:

First, I want to thank you for the opportunity to comment on the draft Environmental Impact Statement (EIS) for the Willamette Pass Alpine Winter Sports Site. I considered the draft a very professional and thorough document.

There are six issues that I would like to comment on. They are 1) wildlife and water, 2) undeveloped areas 3) cross-country skiing, 4) visual, 5) economic feasibility, and 6) transportation.

Wildlife/Water

I personally prefer not to see a loss in habitat for the wolverine and marten for the Alternatives 3 through 6. Under your heading "mitigation measures" for the above alternatives you recommend various actions that the permittee must follow as part of the special use permit requirements. I support these requirements. I also support the requirement that stump removal on the north slope be prohibited.

Undeveloped Areas

I don't quite understand why, for Alternatives 4 through 6, the reduction by 1012 acres of primitive land which includes Malden Peak (a 3 percent reduction of what currently exists). The map on page 59a and the description on page 61 don't seem to agree. Not having a larger map of the total picture makes it hard to understand the change.

Cross-Country Skiing

In your table entitled "Comparison of Issue Resolutions By Alternatives", you state that dispersed users will experience minor changes. I agree with this only if I could obtain a better understanding of where the proposed trails will be constructed. You show in Alternatives 3 through 6 where the proposed PCNST will be placed but you don't show where the trail from Malden Peak Saddle to Gold Lake via Skyline Creek will be. Is the trail to remain where it's presently located (at the base of proposed Lift D)? If so that is a major change for people using that segment of trail when hiking or skiing. You do mention that in these alternatives that nordic skiers will have access from Boundry Pass to Skyline Creek, but I couldn't locate Boundary Pass on the maps and I assumed you meant Malden Peak Saddle.

*3-4-85 cc sent to Oakridge
"noted in 50"*

I do like the idea of a nordic center and the groomed trails!

Visual

The computer plots you have in the draft EIS are very helpful in determining the visual impacts from various locations. The only question I have is what is meant by "projected visual quality objectives"? It would be helpful to have a better definition of "modification" or "retention". Could these reflect a percent area change from the viewing area due to construction of the trails?

Economic Feasibility

Based on the information from Appendix D and Appendix E it seems like the preferred Alternative #4 won't breakeven until the year 2005. I can't see the current permittee financially lasting till 2000 to make a profit. They must be making money now or I would expect them to fold quite soon. Something must be amiss in the breakeven calculations or I don't completely understand the breakeven calculations.

Transportation

On page 100 of the EIS you mention that Hwy 58 has an average count of 2300 vehicles/day. You also state, from OSHD, that the highway can accommodate an addition 900 vehicles/day. I assume these numbers reflect one way traffic and that the counts are for traffic patterns near the pass itself. Was thought given to the effect of having the 900 vehicles/day increase within the hours of say 7AM to 11AM and that same increase in the afternoon? This would also have to be coupled with the fact that approximately 75 percent of the daily average (2300 vehicles/day) probably occurs within a time span of 6AM to 8PM.

Summary

Until the questions I have raised above are answered I feel that I can't support the preferred Alternative #4. These questions are 1) why the change in the primitive designations for alternatives 3 through 6, 2) where is the proposed cross-country trail to Gold Lake going to be, 3) are any of the alternatives economically feasible, and 4) what is the effect of the increased traffic on Hwy 58 for each alternative, above and below the town of Oakridge.

Thank you again for the chance to comment on the draft EIS.

Peter W Bolander

RESPONSE TO COMMENTS FROM PETER BOLANDER

1. Modification of primitive ROS class acreage may occur as a result of proximity (three miles) to new roads or developments which can potentially diminish the isolation and related experiences of the primitive setting. In this case, development of the north side would be less than three miles from the primitive ROS acreage. Thus the primitive ROS classification for this land will change. While the land on Maiden Peak no longer meets the definition of primitive as given in Recreation Opportunity Spectrum language, this change relates primarily to the influence of ski area operation in winter. Most use of the immediate area occurs during the summer and is expected to be unaffected by the change. Use during the winter will be affected by the new development.

The narrative on page 44 describes actual effects on "semi-primitive and primitive dispersed recreation activities in the area". "Area" as used in this sentence refers to the larger area of land, 35,000 acres in size, which comprises all the land classed as semi-primitive and primitive north of the ski area and enclosed by roads. Taken as a whole, use in this area of land will remain largely unaffected by the proposed expansion.

2. The section of the PCNST between Maiden Peak Saddle and the Maiden Peak Trail will remain as a winter cross-country route. Summer traffic would be rerouted as shown on maps for Alternatives III-VI. Nordic skiers traveling the old PCNST would pass by the lower terminal of Lift D. Some nordic skiers may be affected by this encounter with downhill skiers in that it would lessen their feeling of solitude and accomplishment. However, the majority of nordic skiers using this segment of the PCNST presently are skiers that have accessed the area by first riding the summit chair to Eagle Peak.

Boundary Pass is another name for Maiden Peak Saddle.

3. The terms visual quality objective, retention, partial retention and modification are defined in the text in the Affected Environment section. The projected visual quality objectives are what's anticipated after construction has occurred.

These terms do not reflect a percent area change from the viewing area due to construction of the trails. These terms reflect what the eye will see from a given view point.

For more information concerning this matter, U.S.D.A. Forest Service National Forest Landscape Management: Ski Areas, Handbook 462, is available for review at the Oakridge Ranger District.

RESPONSE TO COMMENTS FROM PETER BOLANDER, CONT.

4. The break even calculations are reasonably accurate (see comment numbers 3-5, Willamette Pass Ski Corporation letter). The permittee is pleased with the financial success of their operations to date (personal communication). The Method II demand projections have been recalculated based on actual skier use (see Appendix D). We conclude that the anticipated ability to break-even depends on which demand projections are used in the calculations. Development will be phased in over the next ten to fifteen years. The permittee will be required to demonstrate: 1) a market need for additional facilities (based on updated use information and trends; 2) economic feasibility; and 3) cash or assets to build and operate the proposed facilities.

5. We agree with this comment. Personal communication with the Oregon State Highway Department notes the increase in traffic will cause bottlenecks specifically at the Salt Creek tunnel and the last section of road (with increasing grade) to Willamette Pass. The Oregon Highway Plan (The Oregon Department of Transportation Highway Division) classifies Highway 58 as a D level of service. This classification denotes the degree of congestion on the roadway. The congestion may be caused by such factors as large volumes of traffic, poor road configuration -- i.e. tight curves and narrow lanes -- and no passing opportunities. Level of Service D allows for traffic movement at approximately 40 MPH. Traffic capacity on Highway 58 is not expected to be exceeded until the year 2000 (personal communication - Oregon State Highway Department).

In addition to the bottlenecks at specific places, an increase in traffic accidents is expected.

6. See responses 1-5 above.

For alternatives III through VI, there are two possible cross-country ski routes to access Gold Lake from Maiden Peak Saddle. One would be following the old PCNST route by way of Douglas Horse Pasture and Maiden Peak Trail to the Gold Lake Road. The other route would follow the new PCNST by way of the ridge between Douglas Horse Pasture and Maiden Peak to the Maiden Peak Trail. Follow the Maiden Peak Trail west to the Gold Lake Road.

March 4, 1985

Kristofer Borgias
1215 South 7th St.
Cottage Grove, OR 97424

Michael A. Kerrick, Forest Supervisor
Willamette National Forest

Dear Mr. Kerrick:

In making a statement regarding the proposed expansion of the Willamette Pass Ski Area, I find myself in an interesting position. I am a downhill skier, but might also be labeled as an environmentalist. I can find arguments for both sides of the issue, minimal expansion versus WPSA proposal. After reading the EIS and sorting out the different issues, I would like to submit my input to the decision quagmire.

I believe some form of expansion can be tolerated at Willamette Pass without creating undue environmental or aesthetic damage. However, I think both the WPSA proposal and the "Preferred" proposal are more extreme than is desirable. I would favor a more limited level of development that I believe to be more economically feasible and more suited to the size of the area, its market, and the need to maintain the integrity of the Waldo Lake Wilderness.

This appropriate level of development realizes the fact that the Willamette Pass area is already developed. Thus further development of the south side and West Peak would be fitting with the character of the area, the need to improve the quality of skiing available at Willamette Pass, and the economic feasibility of expansion. Of the different proposals presented in the EIS, Alternative IIB and adding lift # on map 6 is most appropriate.

By leaving the north side pristine, wilderness would remain intact. By adding more lifts opening up more terrain, skier experience would be improved. And finally such a level of development would balance expansion with economic feasibility.

Any north side expansion would fulfill these criteria less so. Although the EIS minimizes environmental concerns about such expansion, it is clear that this feeling is not shared by many proponents of wilderness. Certainly there is some question and doubt about wildlife habitat and compromising the wilderness experience. I personally feel that the Waldo Lake Road already compromises the quality of wilderness, and north side development would not greatly add to this. My major concerns are with major expansion's effects on the skier's experience.

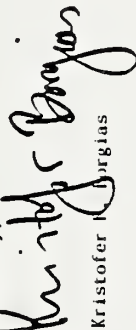
Willamette Pass is a small area. It should be an alternative to areas such as Mt. Bachelor, not a direct competitor. As an alternative, it should remain less expensive, and retain its family character. I see the aggressive level of expansion proposed as running counter to this. Furthermore, since Willamette cannot geographically or climatically compete with Mt. Bachelor, I doubt its ability to remain economically vital while supporting such an aggressive degree of expansion. The WPSA proposal would require a 150% increase in usage. Given the static level of demography and economy in Oregon, this does not seem likely, especially when considering the historically unreliable nature of snowpack at Willamette Pass.

3-6-85
CC sent Orduligo
"ranted in 5"

Thus, I would support a moderate level of development at Willamette Pass, corresponding to Alternative IIB with the addition of a lift G. If further study of north side development confirms it to have minimal impact on endangered species, I could support some north side expansion if this were done to achieve a wilderness variety of ski experience (if this is possible with lift served runs). Certainly, a summit lodge, with its accompanying carnival-like atmosphere, would not be appropriate and would not receive my support.

I appreciate the alternative that Willamette Pass offers to Mt. Bachelor. Lets keep an alternative, not a poor substitute. I thank you for the opportunity to respond and for the work and consideration put in by you and your staff at the Forest Service.

Sincerely,


Kristofer Borgias

RESPONSE TO COMMENTS FROM KRISTOFER BORGAS

1. The economic viability of the proposed expansion alternatives are described in sections on public demand and break-even analysis. See Response to Comments from Waldo Wilderness Council, number 110 regarding the effects of poor snow years.
2. Alternative IIB does provide for construction of two new lifts (G and H). It is discussed in the chapter on Environmental Consequences (beginning on page 28) along with the other alternatives.

January 24, 1985

United States Forest Service
211 E. 7th
Eugene, OR 97401

Re: Willamette Pass Ski Area Development

Dear Sirs:

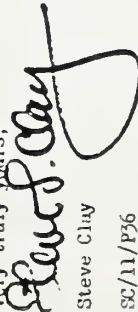
I read recently in the newspaper that your office was soliciting comment on the proposed developments at the Willamette Pass Ski area. I would like to take this opportunity to state my opinions for the record.

I have had considerable opportunity to review the Willamette Pass development proposals and have skied, hiked, and otherwise recreated in the area over the past several years. I feel that I can support the entire master plan for the Willamette Pass with one major exception:

It is my understanding that Willamette Pass proposes to provide overnight lodging at their recreation site. It is my opinion that the recreation site should remain uncluttered by residential structures and should be kept entirely for recreation. I think it is very probable that sewage treatment and clearing requirements would combine to have a very negative impact visually and functionally on the site. It is also my opinion that there is or will be sufficient lodging within 30 minutes of the recreation site to handle the skiers who wish to spend the night closer to the mountain.

I do appreciate this opportunity to comment and hope that you will consider this objection as well as my support of the proposed project in general.

Very truly yours,


Steve Clay

SC/11/P36

RESPONSE TO COMMENTS FROM STEVE CLAY

1. At this time there is no intent to provide overnight lodging at Willamette Pass. The need for on-site overnight accommodations will be considered only after a thorough independent analysis is conducted at the permittee's expense.

*2-1-85 CC sent Orknudg
"routed in 5.0"*

March 28th, 1985

Dear Michael Kenick,

I am writing you concerning the Willamette National Forest's plan of expanding the Willamette Pass Ski Area into the Aviden Peak roadless area near Waldo Lake.

As you know, the proposed plan would clear-cut an area plainly visible from Waldo Lake. Currently the Waldo Lake basin is free of clear cuts ... (1)

existing as a miraculous haven surrounded by about 75,000 acres of unprotected forest wilderness. The proposed clear-cut would be used as a ski run. Unfortunately that proposed ski run would have some very detrimental effects. For example, the proposed ski run lies directly in the path of an elk migration route. It would also reduce habitat for threatened species which live near Waldo Lake such as Martin, fisher, and volverine.

And as I am sure that you know — but just to remind you — Waldo Lake is the cleanest lake of its size in the world. Its water is so pure ... even purer than the distilled water used in laboratories!

I write you this letter because I care — I care ALOT. I love the Willamette National Forest ... and

I love Waldo Lake. In the winter I enjoy that wonderful area both by cross country skiing as well as downhill skiing. I'm a big supporter of Willamette Ski Pass Area and have found it to be just a super place to ski. Even on its busiest days, the runs are manageable and enough for days full of fun. In the summer I spend weeks at a time (when possible) quietly canoeing around one of the most miraculous

places in S.O.
Planning 7-17-80

places Oregon has to offer. Waldo Lake is a rare pleasure... too rare and too cherished to disturb for one more (or any amt. more) ski run.

I ask that you try to understand and hear the words written in this and many other letters of its kind. I will do whatever is in my power to help preserve Waldo Lake as it is. I will do this by writing letters, talking with people, editorials, even scolding people when I see them litter for pollute that beautiful lake. And, I will ask the same of you. Please do whatever is in your power, as supervisor of Willamette National Forest, to help stop the proposed plan of expanding the Willamette Pass Ski Area into the Aviden Peak roadless area near Waldo Lake.

Your cooperation is not only appreciated, it is crucial.

In all Sincerity —

Flaxen Mt. Conway.

FLAXEN D.L. CONWAY
29629 CHURCH DR.
ALBANY, OR 97321
503-758-0194

RESPONSE TO COMMENTS FROM FLAXEN D.L. CONWAY

We understand your concern of the Waldo Lake Area. We also feel this area is very special. Your input on this matter is appreciated.

1. Refer to Response to Comments from Waldo Wilderness Council, number 28.
2. Refer to Appendix C: Wildlife Assessment for more information on these topics.

3-4-85 CC Sent to Oakridge
H. H. Hooted in SO

Dear Sirs,

Regarding the proposed expansion of Willamette Pass Ski Area, I feel that Alternative II is the most reasonable action.

There are serious questions about the economic potential of the ski area, since statistically, three out of every ten years produce poor snow conditions. Projection⁽¹⁾ based on the last three years (good snow years) are therefore overly optimistic.

North side development would be detrimental to areas popular with hikers and cross-country skiers such as Douglas Howe Pasture, Upper Kanny Lake, and Maiden Park. Additional lifts and an access road would create visual scars and noise pollution, marring the back country experience for a significant number of recreationists. Also, a more thorough E.I.S. is needed to adequately address loss of wildlife habitats and air and water pollution.

Alternative II would allow a reasonable amount of expansion for downhillers, without

damaging the wilderness values that exist in the roadless area north of Eagle Peak. A private corporation should have serious reservations about development which would displace many people who enjoy other forms of recreation on this public land.

Sincerely,

Tom Cook

3380 1/2 WILLAMETTE

EUGENE 971405

RESPONSE TO COMMENTS FROM TOM COOK

1. Refer to Response to Comments from Waldo Wilderness Council, number 110.

3 March 1985

Michael Kerrick, Forest Supervisor
Willamette National Forest
PO Box 10607
Eugene, Oregon 97440

Dear Mr. Kerrick,

I am in favor of Alternative #2 for expansion of the Willamette Pass Ski Area.

Expansion to the north slope of Eagle Peak is not justified considering the ⁽¹⁾ potential for pollution from the diesel engines running chair lifts. Gold Lake Bog is a unique area and needs to remain unpolluted.

Expansion ^{to the north slope} is also not justified economically. Who pays for the relocation of the Pacific Crest Trail? What happens ⁽²⁾ on times of poor snow or little snow during the ski season? Are there really that many ^{3-4" of snow in 30} "holes" in 30

new skiers in this area, or would expansion only take away from other existing areas? Willamette Pass Ski ⁽³⁾ Area has already gone under a couple of times during poor ski seasons, albeit under different management. Who is to say it will not happen again? ⁽⁴⁾

Let the ski area expand, but confine the expansion to the south slope of Eagle Peak.

Sincerely,
Joyce Eaton
120 East 30th Avenue
Eugene, Oregon 97405

RESPONSE TO COMMENTS FROM JOYCE EATON

1. See Response number 6 to Oregon Department of Fish and Wildlife describing mitigation measures designed to reduce or eliminate the potential for diesel spills.
2. The permittee will pay for as well as construct the relocation of Pacific Crest National Scenic Trail.
See response number 110 to Waldo Wilderness Council for discussion of poor snow years.
3. See section on Effects on Hoodoo and Mt. Bachelor Ski Areas page 57.
4. It is possible (but unlikely) that Willamette Pass Ski Area could go bankrupt. See response number 116 to Waldo Wilderness Council.

Will Eaton

120 East 30th Avenue
Eugene, Oregon 97405
(503) 343-7692

4 March 1985

Michael Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97440

Dear Mr. Kerrick:

I want to voice my opposition to development of the Willamette Falls Ski Area onto the north side of Eagle Peak. I am particularly concerned with the possible destructive effects on Cold Lake Bog, which as you know is a unique (and beautiful) area and a research natural area. I do not believe adequate studies have been done to accurately assess the effects of such development on Cold Lake and Cold Lake Bog. Such studies would include detailed surface and groundwater hydrologic studies, and a detailed study of the airshed. (To oversimplify, the question is, "Will diesel spills and atmospheric pollution destroy the present natural community?")

While I share with other preservationists the concerns over aesthetics and wildlife habitat, my primary concern is with the security of the Bog. That issue has received less attention - despite the fact that it is most directly affected!


If such plans as north side development are allowed the developer should meet all costs. To my generally conservative and free-enterprise-oriented mind, that would include the cost of the above mentioned studies, before deciding on development. It certainly includes the cost of moving the Pacific Crest Trail, and remapping and reprinting costs associated with updating trail maps and other literature.

The fact is, if the developers had to pay the full cost of this project, and could not claim large tax write-offs (or sell their losses to the highest bidder) the project would probably never materialize. The Willamette Falls Ski Area comes close to going under periodically because of the lack of snow. Development will not change that.

Why should I sacrifice anything for their grandiose dreams?

I doubt that wisdom will prevail against the bright lure of economic development, especially when the development is supported by the relatively affluent land of downhill skiers - but this project has all the trappings of one in which we will give up irreplaceable resources, and to which we will provide taxpayers' money, with the ultimate consequence of providing a tax write-off for wealthy developers.

I urge that you rescind approval of Alternative 4 and let the developers proceed with Alternative 2, which provides for adequate expansion for the present time.

Sincerely,

Will Eaton

RESPONSE TO COMMENTS FROM WILL EATON

1. See response numbers 2 and 3 to U.S. Environmental Protection Agency; number 6 to Oregon Department of Fish and Wildlife; and number 39 to Waldo Wilderness Council.

Detailed pre-project airshed, ground and surface water studies are not needed to make a rational decision on the expansion of Willamette Pass Ski Area.
2. The cost of relocating the Pacific Crest National Scenic Trail will be financed by the permittee. An updated sketch map showing the three miles of relocated trail will be included in the Oakridge Ranger District Recreation Opportunity Guide and handed out free of charge to the public.

R M
E

BERT
EWING

185 E 24TH AVE #4
EUGENE, OR 97405
(503) 342-7306

28 February 1985

Mr Michael Ferrick,
Supervisor
Willamette National Forest
P O Box 10607
Eugene, OR 97440

Dear Mr Ferrick,

I support Option 2 (Southside Only) as the only sound expansion proposal outlined in the Willamette Pass Ski Area Draft EIS. My opinions follow.

The preferred alternative (#4) appears economically speculative with an all-too real risk of financial failure, leaving the area both recreationally and environmentally destroyed. Option 2 allows for stable expansion and a higher probability of success. Option 4 is so radical that it is only prudent to look upon it with great skepticism.

The entire process leading up to and including the Draft EIS has caused my eyebrows to raise: the initial efforts to railroad through an Environmental Assessment, the early lack of seeking adequate public input until forced to do so, the unware of the Forest Service being a bit too intimate with Willamette Pass Ski Corporation, a Draft EIS produced in an incredibly short length of time, all gave the impression that the USFS is just "going through the motions" while knowing the end recommendations before starting.

Sewage and fuel storage problems still appear inadequate. The proximity of proposed changes to Rosary Lakes and Douglas Horsepasture is totally unacceptable, especially the northside road. Also emphatically unacceptable is the impact on the Waldo Basin region.

Enforcement of proposed standards and regulations seems extremely vague.

Again, NO on option 4; YES on 2.

Sincerely,



3-4-85 cc. sent to Oakridge
"noted in 50"

RESPONSE TO COMMENTS FROM BERT EWING

1. On the contrary, we feel the Forest Service has been very responsive to public issues and concerns including the need for additional public input. Scoping was initiated in October, 1983, and continued through November, 1984, as follows:

10-12-83 Met with 12 key members from dispersed recreation groups in Eugene.

10-18-83 Led three members from dispersed recreation groups on field trip to view area.

11-9-83 Met with 27 landowners and permittee's in Crescent Lake Junction.

6-4-84 Publicly announced plans to conduct environmental analysis. Requested letters and oral comments from public.

6-16-84 Led public field trip for 10 participants.

6-27-84 Received numerous letters and phone calls in response to our announcement on 6-4-84.

6/84-8/84 Conducted interdisciplinary team meetings which included public representatives from Eugene Parks and Recreation and Waldo Wilderness Council.

9-13, 18, 19-84 Held open house meetings in Eugene, Oakridge and Crescent Lake Junction. Displayed six alternatives gathered additional public input. A total of 125 people participated.

10-11-84 Issued Notice of Intent to publish environmental impact statement.

11-16-84 Scoping completed.

2. See response number 6 to Oregon Department of Fish and Wildlife and number 4 to U.S. Environmental Protection Agency.

No unacceptable changes are expected from development based on our analysis. The closest proposed development is 1) 1500 feet from and across Malden Peak Saddle from North Rosary Lake, 2) 3250 feet from Douglas Horse Pasture and 3) four to ten air miles from Waldo Lake.

Please see sections in FEIS describing effects on the water (pages 32-33), wildlife (pages 36-39) and recreation (pages 41-44).

RESPONSE TO COMMENTS FROM BERT EWING, CONT.

3. Ways of enforcing the proposed standards and regulations are stated in the Special Use Permit which is available for review at the Supervisor's Office in Eugene or at the Oakridge Ranger District in Westfir.

See Response to Comments from Waldo Wilderness Council, number 42.

Denise G. Fjordbeck
1340 Mill Apt. 201
Eugene, OR 97401

Denise G. Fjordbeck
1340 Mill Apt. 201
Eugene, OR 97401

I have thoroughly reviewed the draft Environmental Impact Statement for the proposed Willamette Pass expansion. I am extremely dismayed by this obviously perfunctory effort to comply with the National Environmental Policy Act. The complete lack of any citation or support for the factual assertions and assumptions made is particularly distressing. In addition to this, I have the following specific concerns:

- 1) There is no consideration of the effect of the expansion on other nearby ski areas, particularly Hood Doo. Also, the philosophical and economic implications of the USFS preferring the group over another is not considered. Proposed developments in other National Forests in the area are also not considered.
- 2) There is no consideration of the effect on water quality in Skyline Creek, a vital water source for the Pacific Crest and Maiden Peak trails. In particular, worst case analyses of impacts on water quality in Skyline Creek, as well as other nearby water resources have not been conducted. Such analyses are required by law.
- 3) There is no support for the statement that fire hazard will not be increased by piled slash along the ski runs. Summer uses are not even discussed. What steps will be taken to ensure that summer maintenance equipment and crews will not create increased fire hazards? Will WPSC be required to maintain fire suppression equipment and that kind of equipment will be needed?
- 4) The economic impact of low snow years is not discussed. Three out of ten years will have inadequate snow during the winter holidays. What effect will this have on skier habits? What impact will this have on the continued economic viability of WPSC? What will be the impact on WPSC's lenders and investors?
- 5) North side development is promoted, despite the admitted moderate to severe erosion potential.
- 6) Monitoring the impact of development on wolverines, goats, and other precious animal resources does nothing to mitigate the effect. Post-development monitoring is no substitute for an adequate pre-development study from which helpful conclusions can be drawn.
- 7) There is no effort to document sensitive plant species, although special habitats admittedly exist. Impacts on Gold Lake are denied in the absence of any study.

Kerrick
Page 2

- 8) Based on my personal experience and that of my friends and acquaintances, the estimate of 100 hikers per year on the Maiden Peak trail is absurd. The visual impact on Maiden Peak should be considered, not simply dismissed.
- 9) The impact of development on dispersed uses is given inadequate consideration.
- 10) The need for more cross-country ski trails is not documented, given the existence of 80 miles of cross-country trails in the area. Also, the impact of the new groomed trails at Bachelor is not even mentioned.
- 11) The impact of grooming equipment on nocturnal animals and snow campers is not considered.
- 12) There is no citational support for a negligible impact on air quality, despite increased emissions from vehicles, heating and power sources, and maintenance vehicles.
- 13) The effect of increased erosion on water quality, air quality, vegetation and animals is inadequately considered. There is no citation for the assumption that complete re-vegetation could be achieved, nor are there apparently any plans to replace the soil which will be lost in the interim before revegetation is achieved. The impact of "irreversible and irretrievable" loss of soil productivity due to buildings, roads and parking lots is not discussed.
- 14) There is no support for the prediction of adequate water supply.
- 15) There is no support for the assumption that five gallons of sewage per person per day will be created. This appears to be unrealistically low, given the need for drinking water, disposal of human waste, water for cooking, etc.
- 16) In the discussion of diesel spills, there is no support for the assumptions regarding the probability and severity of spills. In addition, there has been no analysis of the impact on soil, water, wildlife and plants should a spill occur.
- 17) The DEIS admits that the preferred alternative will have a negative impact on deer and elk habitat. This should not simply be glossed over, but should be thoroughly studied and discussed.
- 18) The impact on the wolverine is unknown. It is apparent that further study is needed of the impact of development on this threatened animal.
- 19) More study is needed of the impact on fisher population as well. There is no basis cited for the assumption that their habitat will not be restricted by increased human use.
- 20) There is also no support for the statement that hartsens will continue to forage in the area. No evidence is given that they will actually like piled slash.
- 21) Worst case analyses of recognized impacts are now required. No such analysis has been conducted with regard to any of the alternatives.

22) The DEIS exhibits a preference for development over solitude, dispersed human activities. The impact of this preference on the human environment should be discussed in detail.

23) The negative impact of development and proposed summer uses on summer hiking and backpacking use is not analyzed. Such uses are known to be very high and rewarding in the area, and may be considered.

24) There is no discussion or documentation of community services needs. In particular, the assertion that additional public services will not be required needs explanation. More people in the area normally leads to greater expenditures for community services.

25) no basis is given for the following economic assumption:

a) The assumption that one worker will be hired for every skitown skier.

b) The assumption that \$3 in secondary revenue will be generated for every one skier dollar. This is particularly questionable, since the major market for Willamette Pass is the Eugene-Springfield metro area. Most skiers will have the ability to return home for meals, lodging and other services.

If published studies exist which would support these assumptions, they should be cited. If unpublished studies are relied on, they should be included within the DEIS or otherwise made available.

26) The DEIS does not consider the possible impact of skier foregone. Then Willamette Pass ceases to be a novelty, will skiers return to other areas, such as Hoo Doo?

27) The skier demand for expansion is assumed and undocumented.

28) Although Table V-19 is undocumented, as is all other economic data, that table does clearly reveal that it is nearly impossible for WPC to break even under the preferred alternative. It is not reasonable to allow a venture on federal land which cannot be self-sufficient to allow the permittee to meet its obligations to the Forest Service, to its lenders, and to its investors.

The lack of documentation within the DEIS, the speed with which it was produced, and your published remarks in its defense, as well as the specific concerns addressed above, call into question not only whether the document was intended only as a pre-forma attempt to comply with NEPA, but also the impartiality of the factfinder. The law clearly requires more. Therefore, the DEIS should be re-drafted in a manner which documents and justifies the conclusions which are reached.

It should be noted that I am not entirely opposed to expansion at Willamette Pass. I endorse Alternative II, expansion within the existing permit area. However, no expansion may be undertaken without an adequate EIS. The present draft is clearly inadequate.

I hope that you will keep these comments, as well as those of other interested members of the public, in mind as you make your decision.

Very Truly Yours,

Denise G. Fjordbeck
Denise G. Fjordbeck

cc: Sen. Mark Hatfield
Sen. Bob Packwood
Rep. Jim Weaver
Waldo Wilderness Council

RESPONSE TO COMMENTS FROM DENISE G. FJORDBECK

1. Priorities for ski area development are outlined in the Willamette National Forest Plan and are included in the FEIS on page 4. The effects on Hoodoo and Mt. Bachelor are discussed at length also (See page 57).

2. Refer to Response to Comments from U.S. Environmental Protection Agency, numbers 3 and 7.

Refer to Appendix G and Response to Comments from Waldo Wilderness Council, number 36.

Included is Council on Environmental Quality (CEQ) 40CFR:1502.22. This regulation clearly defines the legal requirements for a worst case analysis. Because this information is not considered critical to making a rational decision (i.e., there are no significant adverse effects on the human environment anticipated), it is deemed that a worst case analysis is not needed or required for the "impacts" on water quality in this area.

1502.22 Incomplete or unavailable information.

When an agency is evaluating significant adverse effects on the human environment in an environmental impact statement and there are gaps in relevant information or scientific uncertainty, the agency shall always make clear that such information is lacking or that uncertainty exists.

(a) If the information relevant to adverse impacts is essential to a reasoned choice among alternatives and is not known and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.

(b) If (1) the information relevant to adverse impacts is essential to a reasoned choice among alternatives and is not known and the overall costs of obtaining it are exorbitant or (2) the information relevant to adverse impacts is important to the decision and the means to obtain it are not known (e.g., the means for obtaining it are beyond the state of the art) the agency shall weigh the need for the action against the risk and severity of possible adverse impacts were the action to proceed in the fact of uncertainty. If the agency proceeds, it shall include a worst case analysis and an indication of the probability or improbability of its occurrence.

3. Any slash not treated and placed for wildlife mitigation would not be a substantial fire hazard. This is an area of generally "low" fire hazard due to the elevation, short fire season, and high elevation timber fuel type. The heavy snow loads will compact any fuel accumulations; as a result, any generated hazard will be short-term in nature.

RESPONSE TO COMMENTS FROM DENISE G. FJORDBECK, CONT.

Specific fire prevention and preparedness measures will be required for any operations with fire-starting potential. These measures would be comparable to those required for similar activities elsewhere, and will be dictated by state and federal law and specific terms of contracts and the special use permit.

No additional "suppression equipment" for wildland fires would be required.

4. See discussion on snow conditions in Appendix D and comment number 1 in the Willamette Pass Ski Corporation letter.

5. See Appendix G.

6. Impacts to furbearers, eagles, big game, and other wildlife are discussed in detail in responses to various other comments. (See Response to comment from Wilderness Council, numbers 14, 17, 27, 36, 99, 100 and 101; Oregon Department of Fish and Wildlife Comments, numbers 7, 9, and 10; Isaac Walton League Comments number 1; and U.S. Department of Interior Comment number 5. Mitigation for impacted species is discussed in Response to Waldo Wilderness Council Comments numbers 13, 45, 47, 48, 50, 51, 52, 53, 106, and 108; Oregon Department of Fish and Wildlife comments, number 8. We would point out that all aspects of development discussed in this EIS will not be implemented immediately upon approval of the document. Later decisions could be strongly influenced by information gathered by a comprehensive monitoring program.

7. Refer to Response to Comments from U.S. Environmental Protection Agency numbers 3 and 7.

Refer to Appendix G and Response to Comments from Waldo Wilderness Council, number 36.

8. The number of people that hike to the summit of Maiden Peak each summer is estimated at 100. The number of hikers and skiers using the marked portion of the Maiden Peak Trail between Gold Lake road and the PCNST which was not stated in the draft, is estimated at 300-400.

Refer to Comments from Waldo Wilderness Council, numbers 66 and 67, referring to visuals from Maiden Peak.

9. We feel that this concern is adequately addressed. See section describing effects on dispersed recreation in FEIS, pages 44-48.

10. Presently, there is no opportunity for skiing on groomed cross-country ski trails in the Willamette area.

RESPONSE TO COMMENTS FROM DENISE G. FJORDBECK, CONT.

Increasing numbers of nordic enthusiasts desiring the benefits of groomed trails must travel to Mt. Bachelor despite extra costs and time involved. These participants include: people with limited physical abilities who desire or even require a stable track in order to participate safely, and learners of all levels from beginning tourists to advanced racers who are attempting to perfect their techniques.

The groomed trails would increase diversities for nordic facilities and also provide skiable trails during periods of poor snow conditions when the other trails in the area are icy and difficult to ski, especially for a beginner.

There should not be any significant effect on Mt. Bachelor's nordic program. If anything, exposing cross-county skiers at Willamette Pass to the benefits of groomed track skiing may stimulate additional demand for groomed trails and thus benefit Mt. Bachelor.

11. See Response to Comments from Waldo Wilderness Council, number 27.
12. Refer to Response to Comments from U.S. Environmental Protection Agency, number 2.
13. Refer to Appendix G and Response to Comments from Waldo Wilderness Council, number 36 regarding revegetation and erosion control.
14. Irreversible and irretrievable loss of soil productivity due to buildings, roads, and parking lots is mentioned on page 29 of the Willamette Pass Ski Area FEIS. A certain amount of the land area of any type of development or land management activity is required for transportation systems or ancillary development. The current direction is to minimize permanent soil productivity loss by minimizing the amount of land taken out of production.
15. See response number 6 to U.S. Environmental Protection Agency.
16. Agreed. The figure has been changed to 7.5 gallons based on input provided by the Department of Environmental Quality.
17. Mitigation measures designed to reduce the probability and severity of diesel spills are described in response number 6 to the Oregon Department of Fish and Wildlife. See response number 39 to the Waldo Wilderness Council for a discussion of the effect diesel spills may have on soil, water and aquatic plants. Non-aquatic plants, directly affected by large quantities of diesel, would lose a good portion of their foliage. This would probably be fatal. No effect on wildlife is anticipated.

RESPONSE TO COMMENTS FROM DENISE G. FJORDBECK, CONT.

18. Please see Response to Comments from Waldo Wilderness Council numbers 27, 47, and 50; Oregon Department of Fish and Wildlife comments, numbers 7 and 9; U.S. Department of Interior Comments, number 1, and the Wildlife Assessment (Appendix C) for a more complete discussion of this subject.
19. We agree that further study needs to be done concerning the wolverine, but an analysis of the risk to overall status of the animal indicates this project would probably leave a relatively minor impact. (See Response to Comments from Waldo Wilderness Council, number 100).
20. We also agree that improved knowledge of the fisher and its habits would be beneficial. We would point out that the statement referred to was intended to be speculative, rather than an assumption.
21. See Response to Comments from Waldo Wilderness Council, number 52.
22. Based on CEQ, 40CFR: 1502.22 (see response number 2), it is deemed that a worst case analysis is not required.
23. We feel that the EIS does not exhibit a preference for developed recreation activities. As stated on page 41, in the EIS, "the addition of more ski terrain and facilities will be considered beneficial to the recreational experience by some users. Others who prefer the existing solitude and natural character of these areas will find the effects adverse. Both of these are long-term effects."
24. This information has been included. See sections on Undeveloped Areas and Summer Use in the Environmental Consequences Chapter, pages 44 and 45.
25. Personal communication with Klamath County Sheriff Department (Deputy Amiller) notes that no increase in police services would be required.
26. The major increase in the number of people in the area will be in the winter time when access to recreational cabins is limited. Personal communication with the resident Deputy (Horn Hatcher) indicates that an increase in police services may be needed for the Odell Lake area but would not be implemented due to budget constraints. Due to the limited winter access in this area, any vandalism or thefts are not realized until access is available sometime in the spring. Deputy Hatcher was not sure that any additional police services would be beneficial due to the snow bound conditions in the Odell Lake area.

RESPONSE TO COMMENTS FROM DENISE G. FJORDBECK, CONT.

The Oakridge Ambulance service has experienced an increase in calls since the latest expansion at Willamette Pass (personal communication, Oakridge Fire Department). The Oakridge Fire Department currently operates with three ambulances, five paid employees and 18 volunteers. Although the number of ambulance calls have increased, no change in normal operations is expected (personal communication, Captain Mark Sundin). The Oakridge Ambulance service expects to be busier, but does not expect any increase in services to occur.

24. The number of workers hired is based on actual employment figures provided by the Willamette Pass Ski Corporation. We assumed that the number of employees would be in proportion to the number of skiers per day or the ski area capacity. Not being able to predict the number of skiers per day (for each alternative) we based our estimate on the skier at one time capacity for each alternative. The actual figure of 103 employees per 1851 skiers at one time capacity (Phase I) equates to one employee per 18 skiers at one time.

See responses number 77 and 96 to Waldo Wilderness Council.

25. We acknowledge that Lane County (as well as other) skier visits at Willamette Pass Ski Area may decrease as the excitement of new facilities wears off. This is included in Appendix D.
26. The demand calculations are based on a study by the Department of Urban and Regional Planning at the University of Oregon. This document as well as personal communications with Professor David Povey are cited in Appendix D.
27. See response number 4 to Pete Bolander and number 7 to the Sierra Club, Mary's Peak Group.

February 15, 1985

Clayton R. Gautier
277 E. 15th Ave.
Eugene, OR 97401

Michael Kerrick, Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick,

I am writing to express my support for alternative 2 of the Great Environmental Impact Statement on the proposed Willamette Pass Ski Area expansion. One of the greatest shocks I had when I moved to Oregon from California two years ago was the degree to which logging activity has impacted the forested watersheds of the Coast Ranges and the Cascades. There are extremely few easily accessible places left where one can enjoy a panoramic view of an Oregon forest without the intrusion of at least one clearcut scar.

Clearcuts bother me on two levels. The first level is emotional. To put it plainly, I do not like the way a hillside looks with clearcuts on it. The second level is intellectual. As far as I know, forest research in the Pacific Northwest has yet to produce a reliable model that will allow land managers to predict the effects of a clearcut on a watershed's hydrology and future forest productivity. Because clearcuts are a visual nuisance and possibly result in long term degradation of the watershed, I believe that logging and other "development" that result in the clearing of large areas of trees should be carried out with a great deal of circumspection and care.

With respect to the Proposed Willamette Pass Ski Area expansion, it seems to me that alternative #4, recommended by the Forest Service, calls for more timber removal than is really necessary. Most objectionable would be expansion of the ski area into the Willamette Roadless Area. This expansion would result in a clearcut ski runs being visible within Willamette Lake Basin; one of the most unblemished high lake basins in the state. The clearcuts would be an eye sore and would probably result in sediment deposition in Odell Lake and Gold Lake. Alternative #2 is much more acceptable since it would not have an impact on the Willamette Lake Basin and would still provide for a 2/3 increase in skiers at Willamette Pass. Thank you for your attention.

Sincerely,

Clayton R. Gautier
Clayton R. Gautier

RESPONSE TO COMMENTS FROM CLAY GAUTIER

1. Refer to Response to Comments from Waldo Wilderness Council numbers 28, 36, 65 and Appendix G concerning visuals and sedimentation.

871 W. 8th Av. #28
Eugene, Or. 97402
Feb. 25, 1985

Mr. Michael Kerrick
Forest Supervisor
Willamette National Forest
P O Box 10607
Eugene, Or.

Dear Sir;

As a relatively new (1 year) resident of Oregon I am immensely impressed by the natural beauty of the state. As a skier of some 25 years I enjoy the proximity of the ski areas here.

The debate over the proposed Willamette Pass Ski Area expansion did not much impress me until I read your Draft Environmental Statement Summary plus the DES itself. I am somewhat shocked by your obvious enforcement of the northside expansion. I feel that your position should be more neutral.

As much as I love skiing I must oppose the expansion of the Willamette Ski Area into the north side. Incidentally I have no connection with any wilderness group in Oregon, but I have seen too much nibbling away of beautiful natural areas. When wilderness is gone it is gone forever, and this is a prime wilderness area. Leave the north side undeveloped.

Very truly yours,

A. Glines
Alythea Glines

RESPONSE TO COMMENTS FROM ALYTHEA GLINES

1. Refer to Response to Comments from Peggy Robinson, number 1.

As required by the CEQ, 40CFR:1502.14 (e), preferred the agency (Forest Service in this case) must identify the preferred alternative in the draft environmental impact statement as well as in the final environmental impact statement.

2-28-85 (11 sent package
" 29-2-85 in 50

March 24, 1985

Barry Greer
2144 W. 17th Avenue
Eugene, OR 97402
(503) 683-7672

Michael Kerrick
Forest Supervisor
Willamette National Forest
P. O. Box 16607
Eugene, OR 97402

Dear Mr. Kerrick:

I would guess that the decision process is still underway for the alternatives for expansion of the Willamette Pass ski area.

I would like to add my voice to those opposed to any expansion of the ski area to the north. I am dead set against any expansion to the north. Willamette Pass is the easily accessible ski area from Eugene for both downhill and nordic skiers. Expansion of downhill facilities to the north would ruin much of the area now available for nordic day touring on wilderness trails.

But, if the ski area must expand, I would support Alternative 2 for expansion on the south slope. Increased use of the ski area, however, is all the more reason to prevent any development of the north slope of Eagle Peak.

Sincerely,


Barry Greer

cc: Waldo Wilderness Council
Sierra Club, Many Rivers Group
Representative Weaver
Senator Packwood
Senator Hatfield

RESPONSE TO COMMENTS FROM BARRY GREER

1. Refer to Response to Comments from Shellia M. Mahan, number 3.

3/28/85
cc S.O. Norton
" Johnson

January 27, 1985

Mike Kerrick
Forest Supervisor
Willamette National Forest

Dear Mr. Kerrick, I am writing in response to the copy of the DEIS I received on the proposed expansion of the Willamette Pass Side Area.

I have attended the hearings and read all the available literature concerning all of the proposed alternatives. After careful consideration I believe that the preferred alternative (proposal II) would be compatible with the surrounding area as long as the Pacific Crest Trail is directly retracted, that great peaks be taken to prevent possible fuel spills into Skutumpah Creek, and that consultation is given for Crowned ① controls. The possibility that the Willamette habitat will be disturbed should also be monitored carefully since this seems to be emerging as an important issue.

I worked many years to help get the Willamette area protected and did very good that we were able to get it included in the wilderness system! However, I feel

2-1-85 and 2-1-85

that the proposed expansion would have very minor visual impact on the Willamette. I realize that this is contrary to the feelings of many of the same people. I worked with. However, there must be room for compromise and, I am satisfied that both the Forest Service and to a lesser extent, Willamette Pass Ski Corp. have done a good job studying and planning the many proposals. Therefore, I stand committed to proposal III, the preferred alternative!

Sincerely,

Gary G. Guttmann

Gary Guttmann
88313 Milliken Rd
Springfield, Or.
97478

RESPONSE TO COMMENTS FROM GARY GUTTOINSEN

1. Refer to Response to Comments from U.S. Environmental Protection Agency, number 1 regarding the PCNST.

Refer to Response to Comments from Oregon Department of Fish and Wildlife, number 6 regarding mitigation measures designed to prevent adverse effects.

Refer to Appendix G regarding erosion control.

V. U. HALL
3137 HWY 20 SPACE #48
SWIFT HOME, OR 97388
March 25, 1985.

Willamette National Forest Supervisor,
Mr. Michael Kerrick,
Post Office box 10607,
Eugene, Oregon 97440.

Dear Mr Kerrick:

I see by the Dead Mountain Echo. A Oakridge publication, that public comments favor Willamette Pass Expansion.

I would appreciate any information as to the probability of a Motel at the Willamette Ski Area. Has overnite accommodations been mentioned or considered as a presquite to the needs of the skiers?

Would the Forest Service be compatitable to such a project. Would they lease the necessary land for it's construction?

I have had twenty years experience in motel operation, having designed, built and operated one successfully.

The icy conditions of the highway between the ski area and Oakridge, which seems to be the nearest overnite places to stay seems to be a great inconvenience as well as danger.

Any help you may give me will be appreciated. I would also like to know how I may contact the operators of the ski area as to their thoughts on this project.

Thank you kindly,
Sincerely,
Vernon Hall.
Vernon Hall.

RESPONSE TO COMMENTS FROM VERNON HALL

1. Overnight accommodations are mentioned in the Environmental Consequences section of the FEIS on page 53. As stated in the FEIS, it seems premature to support or even thoroughly consider on-site overnight accommodations on Forest Service land at this stage.
2. See response number one above. If a need for overnight accommodations was demonstrated, a special use permit would be required for use of Forest Service land.
3. Willamette Pass Ski Area is operated by Willamette Pass Ski Corporation.

February 12, 1985

Michael Kerrick, Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97440

Dear Mr. Kerrick,

I am writing concerning the proposal to expand the Willamette Pass Ski Area into the Maiden Peak Roadless Area. Although I and many of my friends are skiers, I do not feel that it is necessary to expand Willamette Pass Ski Area. There already exists a more than adequate amount of skiing in the central Cascades, and an expansion is not going to attract any new skiers.

I feel that too much wilderness would have to be sacrificed for this ski area to expand, not only in terms of the loss of beautiful stands of old growth timber, but also in terms of wildlife populations, such as marten and wolverine, losing significant portions of their habitat.

There is far too little wilderness left in this country in general, and Oregon in particular, to justify this expansion at the expense of wilderness. As with any extinct species, once this old growth forest is gone, it is gone forever. I would really hate to see that happen, and strongly urge you not to support this expansion, as recommended in the Forest Service Alternative #4.

I think that Forest Service Alternative #2 would have a much lower impact on wilderness, and still provide for a 2/3 increase in ski use without destroying any wilderness. Also, Alternative #2 would not require relocation of the Pacific Crest National Scenic Trail, and would help to insure that the Waldo Basin area doesn't suffer needlessly from visual, noise and water pollution problems inherent in Alternative #4.

Thank you for your consideration in this matter.

Sincerely,

Laurel Hanley
Laurel Hanley
20520 Old Lorane Rd.
Eugene, OR 97405

2/19/85 "El Paso Park" "noted in S."

RESPONSE TO COMMENTS FROM LAUREL HANLEY.

1. Refer to Appendix D and Environmental Consequences section on Effect on the Economic Environment pages 55-61. As stated in the EIS, "supply and demand for skiing in the Central Cascades has not been fully tapped." See letter from Roger Senders.
2. The north sides of Eagle and West Peaks are not designated wilderness. Refer to Response to Comments from the Family of Don and Charlotte Nording, number 2.
3. See response to two above.

1. The Oregon Wilderness Act, in which Congress established the Waiolu Lake Wilderness, included language which precluded the management of adjacent lands which buffers the wilderness from signs of adjacent human occupation.
2. As stated in the EIS on page 45, expansion alternatives allow for continued winter and summer use of existing trails. Cross-country skiing on existing Forest Service trails will continue at no cost. Fees for cross-country skiing will apply only to the nordic groomed trails built and maintained by the permittee.

Mike Kerrick
Forest Service Supervisor
Willamette National Forest
Eugene, Oregon

Dear Mr. Kerrick:

Enclosed is a copy of my letter to the Many Rivers Group of the Sierra Club urging their support of your option number 4 for the north slope expansion of the Willamette Pass ski area.

The present concern over market studies and economic feasibility are difficult to address since market studies are a very imperfect art.

No market study would have ever forecast the growth and development of the Mt. Bachelor complex. We are reminded that even that facility was close to bankruptcy on several occasions.

Every learned market study at the time told Bill Lear that corporate America would never be able to afford business jet aircraft and that he was sure to fail. He proved them all wrong. Very wrong. Generally, a recreational opportunity must be in place and offered before the public responds in any valid way. The public is itself a very poor predictor of its future interests. They have to try the experience to really know.

I have a hard time believing that the loss of 200 acres on the north slope can have significant impact upon elk and wolverines, with the whole of the Waldo wilderness remaining.

Ind. 12/24
George Z. Stenmark

1

George H. Hiermisch
2165 W. 25th Ave.
Eugene, Oregon 97405

To The Executive Committee
Many Rivers Group
Sierra Club

January 12, 1985

As a member of the Sierra Club, ONHC, FOI and other wilderness and outdoor organizations, I thought it might be useful to the Executive Committee to consider my viewpoints on the proposed northslope expansion of the Willamette Pass ski area.

The Important fundamentals, as I see them, are as follows:

1. One of Oregon's principal industries should be recreation and tourism.
2. The Oregon and Washington Cascade range is blessed with the finest snowpacks and the mildest winter alpine weather of any other mountain range in America. Skiing, in all its forms and varieties, should be one of Oregon's more important recreational activities.
3. Oregon has only five all-weather highways crossing the Cascades. Of these only three are major highway systems, Mt. Hood, Santiam and Willamette. These mountain highway passes should be developed to offer the widest possible variety of skiing experience for the growing populations in the Willamette Valley and those living east of the divide, as well as the increasing number of skiers vacationing from other states.

The Mt. Hood area has extensive downhill and cross country facilities on both sides of the highway including both north and south slopes. It also has access to wilderness and roadless areas for touring and alpine experiences. Santiam pass has a modest facility offering north slope downhill skiing and extensive cross country opportunities in both wilderness and roadless areas on both sides of the highway.

The Willamette pass ski area has been used for skiing since the mid-1930s but has been plagued with the limiting snow conditions of a low level south slope, particularly in bad snow years. Even so, it has continued as an active family ski area for the approximately one quarter million people in the Eugene/Springfield metropolitan area. During this period of extended use, groups have studied a wide variety of plans to improve and enlarge the skiing opportunities of this major Oregon highway pass. These have included a monorail or tramway to Diamond Peak, before it became a wilderness area, and Mauden Park.

3.1 85.00 deal to Clarkridge
3.1 85.00 handled in 50

While not on a major mountain pass highway, Mt. Bucheler has been extensively developed and is now a world class facility. It is not, however, considered a single day skiing area for Willamette Valley residents.

4. Like other major Oregon mountain pass highways, Willamette Pass should be developed for all forms of skiing to the maximum extent that investors and the skiing public are capable of supporting. It can be an important asset, economically and in terms of recreation, to all of the cities of the upper Willamette valley, Onkridge, Crescent Lake, LaPine and Chemult.

5. On the basis of the above fundamental considerations, I believe that the Many Rivers Group of the Sierra Club should fully support any appropriate effort by private investors to expand downhill and cross country skiing to the north slopes of Eagle Peak. I consider it a most appropriate use of that very small butte.

While it was to the club's credit that it was influential in requiring an impact statement for the proposed development, I believe that the group should carefully review the options presented in the LIS and offer its support and endorsement for a plan which would best provide expanded north slope skiing and economic viability.

In the interests of "fairness", I believe the group should be willing to make some sacrifices in its concerns over visibility from Waldo Lake, if it is necessary to the success of the development. It would seem important to the success of the day lodge or "warming hut" to enjoy the striking view to the north, which would be difficult without the facility being visible from Waldo Lake.

I believe that it is particularly important that the Many Rivers Group of the Sierra Club, the Obsidians, and the ONIC take positive stands in support of the full use of this butte for downhill and cross country skiing. To do anything less would do long term damage to the credibility and public support these groups require to be effective. I believe there is more at stake than just the good will and best interests of downhill skiers - there is a serious public perception involved.

The public will easily contrast the extensive acreages of the Oregon escarpment which are now in wilderness areas and unavailable for wilderness alpine cross country or touring opportunities with the meager request of downhill skiers for one small butte at Willamette Pass - a butte that has been used for downhill skiing for almost 50 years.

I believe that the group should be cautious in its effort to verify

economic feasibility of the proposed expansion. Generally, in providing public services, it is difficult to determine use expansion, since the new facility or opportunity must be first created before expanded use occurs. We should be reminded that populations in the Willamette Valley are expected to continue to increase and that winter outdoor sports should be encouraged. I can recall that when I moved to Oregon in 1943, Portland's population was approximately that of the present population of Eugene's metropolitan area. Over the longer term, a well developed ski complex for Willamette Pass will be a very important recreational asset for the state and particularly, upper valley residents.

I encourage the group's support of the Forest Service's option #4 for this project.

Sincerely,

George R. Iermach

RESPONSE TO COMMENTS FROM GEORGE HERRMANN

1. Agreed. The demand projections suggest that far more people desire to participate in downhill skiing than currently do.

3/31/85

Dear Mr. Verrill —

As I understand, the Willamette National Forest is planning to expand the Willamette Pass Ski Area into the Maiden Peak roadless area near Waldo Lake. The proposed clear-cut, which would be plainly visible from Waldo Lake, would be used as a ski run. (1)

As an active skier and strong supporter of Willamette Pass Ski Area, AND as an avid cancer of Waldo Lake in the summer, I feel that the two can exist as they have in the past. Willamette Pass Ski Area is wonderful and has plenty of runs as it is. Waldo Lake is the cleanest lake of its size in the world. It is a cherished treasure of Oregon — too special to be sacrificed for more ski runs.

Your strong opposition to this proposed expansion is requested. Thank you for your cooperation.

Sincerely,
Doreen J. Hock

Doreen J. Hock
29629 Church Dr
Albany, OR 97321
503-758-0194

4-5-85 EC registered in S.C.
P. 104107

RESPONSE TO COMMENTS FROM DOREEN J. HOCK

1. Refer to Response to Comments from Waldo Wilderness Council, numbers 28 and 65 regarding visuals.

February 13, 1975

David A. "Dick"
Forest Supervisor
211 East Seventh Avenue
Eugene, Oregon 97405
Phone 333-0740

Re: Alternatives for Willamette Pass Ski Area Expansion

Dear Mr. Herrick:

I have spent many hours studying the alternatives, of which you will be selecting one very shortly, and I urge you to select ALTERNATIVE II or IIb.

I can understand the desire of the Corporation to expand their downhill operations. However, any expansion beyond Alternative II or IIb is over-zealous for this area. While the snow on the north side of Eagle Peak will be greater in depth and may last longer than that on the south side, it is akin to the snow at Hoodoo Butte--- it is not the soft, dry powder of the Bachelor area which is preferred by the downhill skier. Willamette Pass is not the type to attract the world-wide skier.

In the pursuit of economic development, too little care is being taken and thought given to the consequences that will result if we continue to invade the few remaining pristine areas that once taken away can never be restored!! I, for one, would like to leave these last few acres of natural state forest for those who will come after we are gone.

Willamette Pass is between two wilderness areas and the site of the cross over of the river. Establishing a mini city with living units and motel units as proposed in alternatives V and VI is inconsistent with Forest Service service to the natural environment. Oakridge, Westfir, Crescent Junction already exist and I'm sure they would appreciate building activity there, for the people employed at the ski area.

The problem of sewage disposal has not been adequately addressed for the alternatives: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047 1048 1049 1050 1051 1052 1053 1054 1055 1056 1057 1058 1059 1060 1061 1062 1063 1064 1065 1066 1067 1068 1069 1070 1071 1072 1073 1074 1075 1076 1077 1078 1079 1080 1081 1082 1083 1084 1085 1086 1087 1088 1089 1090 1091 1092 1093 1094 1095 1096 1097 1098 1099 1100 1101 1102 1103 1104 1105 1106 1107 1108 1109 1110 1111 1112 1113 1114 1115 1116 1117 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130 1131 1132 1133 1134 1135 1136 1137 1138 1139 1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1155 1156 1157 1158 1159 1160 1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199 1200 1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221 1222 1223 1224 1225 1226 1227 1228 1229 1230 1231 1232 1233 1234 1235 1236 1237 1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253 1254 1255 1256 1257 1258 1259 1260 1261 1262 1263 1264 1265 1266 1267 1268 1269 1270 1271 1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283 1

7710 N. Jersey
Portland, OR 97203
Feb. 10, 1985

Michael Patrick, Forest Supervisor
Williamette National Forest
P.O. Box 10607
Eugene, OR 97440

Dear Mr. Patrick:

For over thirty years I have known and loved the Williamette National Forest. I have climbed Maiden Peak in September when the geese are flying just over the top of the mountain. I have been to Henry Lake and Bobby Lake many times and I have enjoyed the beautiful horse trails on Skyline Creek. The idea of the Williamette Forest ski area expanding into these unspoiled areas is revolting to me. I hate the idea of the pollution of Skyline Creek which would occur; the defacement of beautiful wild forest land; the permanent loss of wildlife habitat; all sacrificed in favor of an exorbitant expansion plan.

I oppose Alternative #1. Instead I would support Alternative #2. Let's see what they can do under Alternative #2. If they successfully implement Alternative #2 and still have unmet demand for downhill skiing runs, then they will have to tell their case for expansion of the permit area and will have no trouble amassing the necessary capital. Why should the Forest Service go out on a limb in support of their speculative scheme?

Sincerely,

Russ Jolley
Russ Jolley

RESPONSE TO COMMENTS FROM RUSS JOLLEY

1. As stated in the FEIS on page 11, the permittee will be required to demonstrate a market need for additional phases, economic feasibility and evidence of cash or assets to finance development.

2-12-85 CC sent to Jolley
"noted in 50"

RESPONSE TO COMMENTS FROM MICHAEL S. JONES

1. No expansion is taking place in the Waldo Wilderness area. As stated in the EIS on page 22, these areas have been allocated to a potential winter sports study area.
2. Alternative IV is the Forest Service preferred alternative. Alternative V is the Willamette Pass Corporation proposal.

February 14, 1985

Michael Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick:

I am writing to you concerning the development of the Waldo Wilderness area. I am opposed to any further development of the area, especially in the form of new, expanded ski runs which would come at the expense of our natural wild lands. For this reason I support Alternative 2 as a reasonable compromise to the currently proposed alternatives. Alternative 4 as proposed by the WPSA is completely unreasonable and would destroy the pristine beauty of the surrounding areas. To this end I would also support including Harden Peak in a future Wilderness bill to prevent this area from encroachment by hedonistic developers.

Thank you for considering my letter.

Sincerely,

Michael S. Jones

Michael S. Jones
P.O. Box 403
Springfield, OR 97477

2-19-85 CC sent to Kerrick
.. noted in 30

G.C. KINGSBURY JR.
130 E. 49TH AVENUE
EUGENE, OREGON 97405

January 20, 1985

Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97405

Attn: Mike Kerrick, Forest Supervisor

Dear Mr. Kerrick,

As a flyfisherman (long time member and past president of Mc Kenzie Flyfishers), backpacker, frequent summer visitor to Gold Lake, and skier; I write this letter in support of expansion of the ski facilities at Willamette Pass.

The opponents of this development will ignore the very beauty of this development. It is very compact and provides a variety of winter activities to a lot of people in a relative small area. There is very little visual impairment. The lifts do not operate during the summer months and a majority of the runs are hidden by the trees.

I also disagree with the argument concerning disruption of wildlife habitat. The clearings resulting from trail development will actually enhance wild-life food chains. This has been proven in clear cut logging.

The future of Lane County will be one of continual growth. The tourist industry is important to our economic future. When people want to come to Lane County we sell the "Ski Level to Sea Level" theme. The pressure for more winter recreation areas will increase. Willamette Pass is providing quality, well maintained and supervised facilities within easy driving distance of 5 counties. The further expansion of this area will postpone the day we will have to

1 23-85 Copy sent to Mike Kerrick

G.C. KINGSBURY JR.
130 E. 49TH AVENUE
EUGENE, OREGON 97405

open new forest areas to winter recreation.

Willamette Pass is an important day facility allowing people to enjoy winter activities without the expense of an overnight trip. This is very important to the area high schools and their ski teams.

Sincerely,

G.C. Kingsbury

RESPONSE TO COMMENTS FROM G.C. KINGSBURY

1. This information has been incorporated into the FEIS.

WILLAMETTE NATIONAL FOREST

16 Dec 1961

Eugene 97140

8 January 1965



Re: Expansion of the Willamette Pass Ski facility to include the North Face of the mountain.

I am writing to say that I definitely oppose further expansion of the Willamette Pass Ski area. It is important that human activity isn't allowed to encroach further upon wilderness area, very little of which remains in the world today. With the increase of human population and the resulting despoliation of the Earth we must be careful to consciously limit the destruction of habitats of plant and animal species that are not yet extinct. They also have rights to space on this planet. And their vulnerability makes them helpless when faced by the dangers of mankind. If year by year little bits are snatched from the wilderness, we will all be left impoverished. (1)

Hands off the North Face - please.

Sincerely,

Nena B. Lovinger
1415 E 21st Ave.
Eugene, 97403

1-11-65 CC sent to
.. ..

RESPONSE TO COMMENTS FROM NENA B. LOVINGER

1. No wilderness is being "snatched" away. Refer to Response to Comments from the Family of Don and Charlotte Norling, number 2.

Sheryl MacDonald
3975 Alder
Eugene, OR 97405

February 21, 1985

Michael Kerrick
Forest Supervisor
P.O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick,

I am writing with regards to the proposed expansion of the Willamette Pass Ski area. I am speaking as both a wilderness lover and a downhill racer. The Waldo lake area is one of the most beautiful wilderness areas in all of Oregon. When I visited it for the first time, I was struck by its preservation. You can look for miles around and see nothing but mountains, and trees. There is absolutely no sign of human destruction. This is only one of the aspects of the beauty of Waldo lake. To expand Willamette Pass ski area into the North Slope would upset the delicate ecosystem. The Cougars which inhabit the area now, would soon be extinct. The beautiful timber would be clear cut in order to put in ski lifts and runs. Who knows what would happen to one of Oregon's clearest and cleanest lakes. Waldo lake is truly a paradise, and for all of this to happen would simply be a crime.

This state is already overrun with ski areas. As it now stands, Willamette Pass caters to the needs of its Eugene crowd very well. Is there really a need for expansion? Let's not ruin our beautiful Oregon wilderness areas for a couple of people who want to make a dollar. Let's keep Oregon beautiful. Please preserve Waldo lake.

Sincerely,

Sheryl A. MacDonald

Sheryl A. MacDonald

RESPONSE TO COMMENTS FROM SHERYL A. MACDONALD

1. Refer to Appendix C, Wildlife Assessment regarding cougar.
2. Refer to Appendix D, Public Demand for Skiing at Willamette Pass.

RESPONSE TO COMMENTS FROM SHEILA MANAH

1. As stated in the EIS on page 16, snow conditions at Willamette Pass Ski Area have historically been marginal or insufficient at the base area three out of every ten years. The demand projections assume that the economy will stay fairly consistent; however, national as well as regional and state and local trends indicate that the number of skiers and their participation rate is increasing. (See Appendix D). The demographics affected by the "Baby Boom" generation are indeed getting older. One can also hypothesize that as this section of the population ages, young families with older children will return to skiing thus opening up old and new markets (personal communication, Fovey).
2. Mitigation measures designed to protect the area and the effects associated with diesel spills are discussed in response number 6 to Oregon Department of Fish and Wildlife and number 39 to Waldo Wilderness Council.

The removal of structures and improvements is discussed in response number 116 to Waldo Wilderness Council. We acknowledge that the construction of buildings, roads and parking lots will result in a long term impact on soil productivity. Ski runs, however, can be revegetated to their original condition.
3. The only cross-country route effected by the proposed expansion to the north side is a short segment of the PCNST near the bottom terminal of D chairlift. At this point, nordic skiers will come in seeing and hearing distance of downhill skiers but only for a short distance of about 200 yards. There will be no diesel fumes or engine noise in this area because the drive unit for D chairlift will be located at the top of the lift. Nordic skiers skiing the PCNST Loop route can avoid passing by the lower D chairlift by skiing the new PCNST to the Maiden Peak Trail and returning via this trail to the Gold Lake Road.

The proposed groomed trails will not replace the existing forest trails in the area and they will remain open to the public free of charge.

Leo Marquis
2385 Tyler
Eugene, Oregon 97405
February 12, 1985

Michael A. Kerrick
Forest Supervisor
Williamette National Forest
P.O. Box 10607
Eugene, Ore 97410

Dear Sir;

A review of the Williamette Pass Alpine Winter Sports Site Draft Environmental Impact Statement moves me to respond to the question, does there have to be any expansion of existing facilities? The Statement seems to support expansion, but proof of need rather than projection should be the rule, especially in the area of the proposed modifications, the Williamette Pass.

There, thousands of people have found release of desire to take a hike, use a camera, ski, ride a boat, catch a fish, view a mountain peak, see a wild thing while using the trails, lakes, slopes and roads presently available. Why gamble the integrity of even one of these resources with the massive changes outlined within the Statement under alternatives III, IV, V and VI? The environmental consequences from these alternatives are presented and wellcovered but the chronic threat of miscalculation and accident remain. A major diesel spill for instance, could cause a trauma from which a fine place like Gold Lake would be a long time recovering. Why not develop the plan of alternative II B, do a good job on it and see how it is received and used? This move to a more ambitious alternative could always be made later if demand warranted it. This would retain the present buffer between the developed ski area and Gold Lake.

I have used Gold Lake for fifteen years and have become very fond of it. From the road off highway 58 leading to the lake, I have twice been given a glimpse of the Martin. The lake itself is small but pretty as anywhere. I've seen deer on its shores and watched the Ospreypatrol the water and take an occasional dive in an effort to catch its fish. This elk expose themselves from time to time while grazing on the borders of the bog just north of the lake. There are always a few ducks, the Mallards that are raised there become tootame after sharing the fishermen's fare all summer. I saw the Otter a long time ago. Some of the fish are visible in early spring. They fill the outlet during the spawning effort. There are all wild creatures and to be with them in their natural place is nourishment for the soul.

Sounds are muted there and quiet is easy to get used to, but I've heard it disturbed in the very early morning by the cacophonous outburst of coyotes communicating, discordant as it is, it is but another dimension of the place and its welcome. I like to think these things will be experienced again-for years to come. I feel the chances for their future presence would be improved if activities to enlarge the winter sports area are kept off Eagle and West Peaks.

Gold Lake is a special place, a source of many pleasant memories for many people, a precious resource that deserves to be defended against any threat that would lessen its charm.

yours truly

Lee Marquis
Lee Marquis

1

2

2-13-85 CC [unclear] [unclear]

RESPONSE TO COMMENTS FROM LEE MARQUIS

1. No expansion is addressed through Alternative I - the No Change Phase I Only Alternative. Refer to Environmental Consequences, Public Demand for Skiing at Willamette Pass page 58 for a discussion on the projected future needs for downhill skiing.
2. Refer to Response to Comments from Oregon Department of Fish and Wildlife, number 6, regarding mitigation measures for water quality.
Refer to Response to Comments from Russ Jolley pertaining to phase development.

DRS MILLER, JOHNSTON, MAXWELL, AND BROWN, PC

ATTORNEYS AT LAW
1000 BROADWAY, SUITE 1000
NEW YORK, NEW YORK 10004
TELEPHONE: 212-677-1000

NOTARIAL PUBLIC STATE OF NEW YORK
JULIUS J. BROWN, JR.
JULIUS J. BROWN, JR.

March 1, 1985

Michael A. Kerrick, Forest Supervisor
Willamette National Forest
Federal Building
Eugene, OR 97401

Dear Mr. Kerrick:

Enclosed is a copy of the letter to the editor that I sent to the Eugene Register Guard.

The last 25 years I have visited both Willamette Pass and the Waldo basin and I wanted to urge you to vote no for the development on the north side of the mountain and yes for the development on the south side.

Thank you sincerely,

Winston E. Maxwell
Winston E. Maxwell

SPS
ENC.

DRS MILLER, JOHNSTON, MAXWELL, AND BROWN, PC

ATTORNEYS AT LAW
1000 BROADWAY, SUITE 1000
NEW YORK, NEW YORK 10004
TELEPHONE: 212-677-1000

NOTARIAL PUBLIC STATE OF CALIFORNIA
JULIUS J. BROWN, JR.
JULIUS J. BROWN, JR.

March 1, 1985

Register Guard
975 High Street
Eugene, OR 97401

TO THE EDITOR:

I purchased Army Surplus unlaminated wooden skis and square toed boots for my first ski run at Willamette Pass in 1952. Though the skis broke on the first run, I was hooked on a great sport and still ski at Hoodoo, Willamette Pass and Bachelor. In those days there seemed to be endless wilderness and forest trails that led to beautiful and magical places. It was easy to imagine living in an earlier time while feeling the wonder that comes to one in the solitude of wilderness.

I feel a personal conflict between an Oregon treasure and its forested basin ("view-shed") and the desires of the Willamette Pass Ski Corporation. There is no question that clear cuts and ski lifts will mar the view-shed of the Waldo Lake area. A timeless scene will be compromised in one more area, but this is not just another area - Waldo Lake and its basin are world class.

The successful alternative for Willamette Pass is development of the south side of the mountain, leaving the north side unscarred. Future generations will appreciate our foresight and the wild life there will still be able to reside in their natural habitat.

Sincerely,

Winston E. Maxwell

SPS

34-85 cc sent to Oakridge
as noted on SD

RESPONSE TO COMMENTS FROM WINSTON E. MAXWELL

1. See Response to Comments from Waldo Wilderness Council, numbers 29 and 65 regarding visual impacts on the Waldo Lake area.

January 16, 1985

Michael Kerrick, Forest Supervisor
Willamette National Forest
P. O. Box 10007
Eugene, OR 97440

Dear Mr. Kerrick,

Thank you for the opportunity to comment on the draft EIS for the Willamette Pass Ski Area proposal. I have reviewed the document; and Alternative 2 has my support. This alternative allows a 2/3 increase in skiers with minimal potential risk to the many values extant in the area.

I am especially concerned that the preferred alternative, Alternative 4, would impact several rare or threatened wildlife species, including the wolverine, cougar, marten and fisher. You admitted in a recent piece in the REGISTER-GUARD that little is known about the habits and requirements of the wolverine, but that study continues. If so little is known, it doesn't seem wise to take the risks inherent in Alternative 4.

Of further concern to me is the possibility of water pollution in Gold Lake Bog Research Natural Area, Odell Lake and Salt Creek as well as intrusion in a roadless area that should be a part of the Waldo Wilderness. I know that you have stated that the fight for increased wilderness is over for now, but we both know that is not true.

Finally, the proper way to make a decision on the expansion proposal is through the Forest Plan process. In this way, all the values at stake could be evaluated more efficiently and more accurately.

Sincerely,

(Signature)
Gregg Morris
3170 Emerald St.
Eugene, OR 97405

*1-18-85
CC sent to Mr. Morris
1/21/85*

RESPONSE TO COMMENTS FROM GREGG MORRIS

1. Refer to Appendix C and Response to Comments from Waldo Wilderness Council, numbers 13, 14, 52, 53, 99, 100, 101, 102, 105 and 108 regarding wolverine, cougar, marten and fisher.
2. Refer to Appendix G and Response to Comments from Waldo Wilderness Council, number 36 regarding water quality.
Refer to Response to Comments from Oregon Department of Fish and Wildlife, number 6 referring to mitigation to prevent diesel spills.
Wilderness designation must be approved through congressional process.
3. A project-specific environmental impact statement is deemed to be a better forum than the Forest Plan for the determination of site-specific environmental effects on and around the project area. See Response to Comments from Jeff Zakel, number 1.

P.O. Box 3516
Eugene, OR 97403

4 March 1985

Michael A. Kerrick
Forest Supervisor
211 East Seventh Street
P.O. Box 10607
Eugene, OR 97400

Dear Mr. Kerrick,

Having reviewed the Willamette Pass Alpine Winter Sports Site Draft Environmental Impact Statement, I ask why not develop only the south side of the Willamette Pass Ski Area to its fullest extent. Then, if a justifiable demand for additional lifts on the northside is warranted, coupled with environmental safeguards, develop the north slope. Meanwhile, let the north slope stay in peace. As a nordic skier who has enjoyed the Rosary Lake-Gold Lake-Walden Peak area for many years now, I would like to see it remain the unspoiled region that it is.

I do not believe intruding into the threshold of the boundaries of a truly wild area for downhill ski expansion is warranted at this time. Hoodoo Ski Bowl is another ski area that services the needs of the Eugene-Springfield community. Nowhere in the DEIS did I find a major reference to this point. In addition, Gold Lake and Skyline Creek deserve full protection for their pristine water quality. Finally, the fisher and martin populations surely will be adversely affected by this expansion. To further limit their habitat to but a few smaller islands of (capital-W) wilderness would not only be a tragedy but also a travesty of our responsibilities as guardians of the forest ecosystem.

I am opposed to the adoption of alternative IV for the Willamette Pass Ski Area. As a nordic skier I have long enjoyed the solitude and refreshment that fills me when I travel forth into the backwoods. Leaving behind the frantic pace of a crazy world gone plastic, I am filled with the tranquility that only the wind in the trees and the "shoosh" of skills sliding under me can give me. I go to the mountains to be renewed; not to be run over by some daring alpine skier. Expand the Willamette Pass Ski Area if need be; but please, stay on the south side.

Sincerely,

Brian Niemeyer

Brian Niemeyer

PS: Why not alternative showing only southside lifts (i.e. 6 & 11)?
3-4-85 CC sent to Oakridge
" " mailed in SD

RESPONSE TO COMMENTS FROM BRIAN NIEMEYER

1. The permittee will be required to demonstrate a market need for additional phases, economic feasibility and evidence of cash or assets to finance development.
For reasons regarding development of north side slopes refer to Response to Comments from Waldo Wilderness Council, number 6.
2. Effects on Hoodoo and Mt. Bachelor Ski Areas are discussed in the Environmental Consequences section on page 57. Table IV-17 illustrates place of residence of respondents by usual place of ski activity.
3. Refer to Appendix G and Response to Comments from Waldo Wilderness Council, number 36, referring to water quality.
Refer to Response to Comments from Oregon Department of Fish and Wildlife, number 6, referring to mitigation to prevent diesel spills.
Refer to Appendix C: Wildlife Assessment and Response to Comments from Waldo Wilderness Council, numbers 13, 14, 52 and 53 regarding fisher and marten populations.
4. Alternative IIB is a south side only alternative including lifts G and H, as discussed under Chapter II on Alternatives.

12 January 1985

Willamette National Forest
P.O. Box 10007
Eugene, Oregon 97440

Re: Proposed Willamette Pass ski resort expansion.

Dear Mr. Mayhew:

As a native Oregonian and world traveler, I recognize how unique, beautiful and relatively unexploited the state of Oregon is. Environmental decay is now painfully evident throughout the world. People suffer and are demoralized as a result. Wildlife habitats diminish by the day, and many species teeter on the brink of extinction.

Why has this occurred? The twentieth century has seen tremendous growth of human population. Land area needed for settlement and to support the basic needs and follies of humans has been appropriated from the wilderness.

Some of the consequences? Water, air and soil quality decline. Helpless animals and plant forms are eliminated from the kaleidoscope of life. It soon becomes apparent that people, too, are immeasurably impoverished by the loss of ecosystems that also have rights to space on this planet.

Therefore, I write to ask you not to expend the Willamette Pass ski resort to the north slope wilderness of the beautiful mountain that currently is a place for people, other animals and plants. The exploitative nature of mankind must stop or we will all slip into a dreadful mass of our own making.

Please stop development before it's too late. Let's enjoy the Willamette Pass ski resort at its existing size.

Sincerely,

Russell L. Norberg

Russell L. Norberg
20 D. Wood
Springfield, Oregon 97411

*1-14-85
CC Aunt Becky
" Natl. Wild. Soc.*

RESPONSE TO COMMENTS FROM RUSSELL L. NORBERG

1. No expansion is occurring in wilderness. Refer to Response to Comments from the Family of Don and Charlotte Harding, number 2.

Dear Mr. Kerrick,
Feb. 22, 1985
Don + Charlotte Nording
3560 Willowbrook
Eugene, OR 97404

Just a note to express our concern regarding the expansion of the Willamette Pass, Eagle Peak ski area.

Our family (8 of us) enjoys both skiing in the area in winter as well as hiking and camping there in summer. We do not feel the addition of more ski lifts and lodge is needed for this beautiful area. Only 14 miles ⁽¹⁾ further is another beautiful ski area.

Let's make use of the facilities we now have and not degrade the untouched wilderness we treasure so much. ⁽²⁾

Sincerely,
The family of Don + Charlotte Nording
3560 Willowbrook
Eugene, OR 97404

RESPONSE TO COMMENTS FROM THE FAMILY OF DON AND CHARLOTTE NORDING

1. The closest existing ski area is Mt. Bachelor which is about 75 miles away.
2. The area north of Eagle and West Peaks is designated unroaded dispersed recreation, not wilderness. In addition, based on the current Willamette National Forest Land Use Plan Final Environmental Impact Statement, this area has been allocated to a potential winter sports study area.

Richard A. Pastor
305 Delay Drive
Eugene, Oregon 97404
(503) 689-6108

March 3, 1983

Michael Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97440

Dear Mr. Kerrick,

I am writing in response to your request for public comment concerning the proposed Willamette Pass Ski Area (WPSA) expansion. I have reviewed the published Draft Environmental Impact Statement, and I am in disagreement with Alternative #4, the preferred alternative selected by the Willamette National Forest. I believe that Alternative #2 or #2b would solve many of the current problems that exist at the area without the possible adverse environmental impacts of the other alternatives.

I have been a downhill and nordic skier for more than 15 years. I have enjoyed skiing at the WPSA on at least 45 days during the past 5 years, and I have also skied numerous times at Hoodoo and Mt. Bachelor ski areas. In addition, I have been employed for several years at White Pass Ski Area and at ski rental shops in Washington. I feel that the main problem now existing at the WPSA is the congestion at the lift entrance areas, especially on weekends and holidays. Increasing the ski lift capacity by addition of a second lift to the top of Eagle Peak from the existing resort area would alleviate much of the present crowding problem. The existing ski runs do not appear to be overly crowded even on very busy days, and at most, I think that several more intermediate-level runs should be added to the south side of Eagle Peak. The proposed expansion of the WPSA to the north side of the mountain would add many short, steep ski runs for advanced skiers, but would not appear to increase the capacity of the area for the large number of beginner and intermediate-level skiers now using the WPSA.

As a nordic skier, I have enjoyed the roadless areas around Gold Lake, Roary Lake, and Fallen Leaf on numerous occasions. I do not feel that there has been a demonstrated need for expansion of the WPSA to the north side of Eagle Peak. The existing developed area on the south side of the mountain should be improved and then studied further before any new development is allowed in these high elevation roadless areas. For the above reasons, I believe that Alternative #2 would provide for the most cost effective and environmentally sound expansion of the WPSA.

Sincerely yours,

Richard A. Pastor

3585CC sent to Oakridge
" " mailed in SD

RESPONSE TO COMMENTS FROM RICHARD A. PASTOR

1. The majority of the proposed runs on the north side are intermediate in difficulty. Refer to Table IV-8, classifying terrain difficulty served by existing and proposed ski lifts.

The varied terrain and better snow conditions on the north side is anticipated to relieve congestion on Kaleidoscope, the only intermediate run leading from the summit of Eagle Peak.
2. Refer to Response to Comments from Waldo Wilderness Council, number 6 regarding north slope snow conditions.

Mr Kerner

Some A. might be offered to development of the north slope of Eagle Peak at Willamette Pass, the area, as a scenic area of the state is because its relatively unspoiled beauty. Some an outdoor person who enjoys unspoiled wilderness would need to exploit it.

As stewards of our land, the Forest Service is making a grave mistake by trying to develop more than necessary. It is my understanding that the WPSA has a history of forest bankruptcies.

A more prudent decision seems to be alternative 2. This would increase the service to others without decreasing wildlife and land.

Once again, I am opposed to the poor judgment shown in granting development of the north slope. I will work with others who truly understand the value of this land, and will want to save it for future generations.

John C Perry
2774 Friendly St.
Eugene OR 97405

RESPONSE TO COMMENTS FROM JOHN C. PERRY

1. Refer to Background of the Willamette Pass Alpine Winter Sports Site on page 1.

Yes, WPSA has had a history of several bankruptcies. These have not occurred under the present ownership or level of development.

1-11-85 10:00 AM
10:00 AM 10:00 AM

JANUARY 5TH, 1985

NATIONAL FOREST SERVICE
EUGENE BRANCH

IN REGARDS TO: WILLAMETTE PASS EX-
PAUSION PROPOSAL

WE FEEL THAT THERE SHOULD BE
A DECISION BASED ON AN ENVIRONMENTAL
STUDY — NO MATTER WHAT, THE EX-
PAUSION SITE SHOULD BE THE LEAST
DETRIMENTAL TO THE ENVIRONMENT.

IF THE PROPOSED SITE SUPPORTS
A HEALTHY HABITAT FOR THE
WOLVERINES AND BALD EAGLES, THEN ①
AN ALTERNATE SITE SHOULD BE
PROPOSED.

TO US WILDLIFE COMES FIRST!

SINCERELY,

Donald R. Wagner
79540 FIRE RD
LOCANE, OR. 97451

wildlife artist: Karen Pidgeon
10. Box 15
Locane, OR 97451

RESPONSE TO COMMENTS FROM DONALD R. WAGNER AND KAREN PIDGEON

1. There are no records of bald eagle nesting or established roosts near Willamette Pass area. See Appendix C, Wildlife Assessment.

2034 Alder Street
Eugene, OR 97405

Mr. Michael Kerrick
Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, OR 97440

February 17, 1985

Dear Mr. Kerrick:

As you make your decision regarding the expansion of the Willamette Pass Ski Area I would appreciate it if you would add my letter to those in support of A l t e r n a t i v e 2.

My decision is based on a fear that a series of mild winters will bankrupt the Willamette Pass Ski Corporation but that the damage to the now existing de-facto-wilderness area north of Eagle Peak will have been done permanently.

I am also concerned that the now-extanting Hoodo Ski Area will suffer financially as more and more skiers are drained off towards Willamette Pass. I believe viewed from a state-wide perspective you would be robbing Peter to pay Paul.

Again, please register my vote in favor of ALTERNATIVE 2.

Helmut R Plant
Helmut R Plant

RESPONSE TO COMMENTS FROM HELMUT R. PLANT

1. Refer to Environmental Consequences section on the effects on Hoodoo and Mt. Bachelor Ski Areas, page 57.

1599 Orchard
Eugene, OR 97403
January 17, 1985

Michael A. Kerrick
Forest Supervisor
Williamette National Forest
211 E. 7th Street
P.O. Box 10607
Eugene, OR 97440

Dear Mr. Kerrick:

Here are my comments on the Williamette Pass Alpine Winter Sports
Site Draft Environmental Impact Statement.

I realize that a great deal of careful work has gone into the pro-
duction of this EIS, and the existence of these reports at all is
a significant advance over former times when development took place
willy nilly. However, from past experience it seems almost axiomatic
that ecological damage caused by development of hitherto wild land
turns out to be both and greater and different than anticipated.

In reading through the EIS, I was struck by the implicit assumption
by the Forest Service that downhill skiing is a positive value to
be encouraged. The case for "need" for more downhill facilities
seems problematic. An example of this is the projection that if the
preferred Alternative IV is implemented at Williamette Pass, then
business will initially decline at Hoodoo. The report hastens to
add that this can be "overcome" with increased promotion, i.e. per-
suading more people to ski because skiing is some kind of ultimate
good, rather than just one among many forms of play!

There is nothing wrong with downhill skiing in an area already devel-
oped for it, but to develop more wild forest land to promote increase
in this form of play seems to indicate a skewed sense of values.
Environmentalists are often accused of trying to promote their own
"elite" preferred forms of recreation such as hiking and backpacking
(which just happen to do less ecological damage than downhill skiing,
snowmobiling, motorboating, 4-wheel drive travel, etc) at the expense
of other peoples' preferred types of recreation. However, I think
a much larger issue is at stake here, not considered at all in the
EIS--the intrinsic right of wild land to exist for its own sake,
whether humans visit it, "use" it, or "appreciate" it or not!

Perhaps this philosophical issue is not debated at the bureaucratic
level at which EIS are created. If not, I would like to know at what
level the Forest Service does discuss the anthropocentric versus the
biocentric approaches to land management, and I personally would like
to be part of the planning and public input process at that level.

Sincerely,

Peggy Robinson

Peggy Robinson

RESPONSE TO COMMENTS FROM PEGGY ROBINSON

1. Downhill skiing is one of many multiple use activities that could
occur in this area. As stated in the EIS pages iii and iv, six
alternatives (and variations) were considered. These
alternatives ranged from no action to maximum development. As
part of the EIS process the interdisciplinary team evaluated the
trade-offs of development versus non-development or dispersed
recreation. Based on this process, it was recommended that this
area had more value to be expanded as a ski area rather than
to be left in its present condition.

34655

Dear Mr. Herrick,

I am writing in regards to the proposed expansion of the Willamette Pass ski area. I feel that expansion onto the north side of Eagle Peak is a rather ill-conceived plan. As a back-country skier this would certainly reduce my options for touring in the Gold Lake-Waldo Lake area. And I have no desire to ski on groomed nordic trails with a crowd of other people. But personal preference aside, a lot of questions still come to mind. This seems like an over-extension of their operation. Is Willamette Pass, Inc. trying to become a destination resort? A puny little peak like Eagle Peak? Come on. Prior owners have had a history of financial troubles. Several years of good snow have been a blessing, but can they survive a few bad ones. Especially with the financial burden of this massive planned expansion. It worries me to think that if this marketing gamble fails, all the public will have to show for it will be some nice new clear cuts. I've been told that the EIS contains some options that would allow another lift and further expansion on the south side. If Willamette Pass, Inc. really must expand then let them do it there. Encroachment into the Waldo Lake back-country is too serious to be written off as a business risk.

Best Regards,

John Rygh

John Rygh
518 W. 23rd
Eugene, OR 97405

3-4-85 CC Ant Exp'd
"modified 50"

RESPONSE TO COMMENTS FROM JOHN RYGH

1. Willamette Pass is a day-use area, overnight lodging is not approved at this time.
2. Refer to Response to Comments from Waldo Wilderness Council, number 110 and Comments from Willamette Pass Ski Corporation, number 1.

2-19-85 CC and Dink
.. noted in 50

Feb 13, 1985

Dear Sir:

After reading the Environmental Statement on the Williams Pass Ski area, I want to go on record as strongly opposing any expansion on the north slopes of Eagle and West Peaks.

After going to Gold Lake camping & fishing far more than 20 years I would hate to see anything that might be harmful to that area. Any pollution that gets in Skyeine Creek is bound to have some effect on Gold Lake Bog and ¹possibly the lake too. The maps showing Gold Lake don't show all the streams running into the lake. On the east shore about in the middle ²of the lake there is a small stream that runs the year around. Any pollution getting into that

2

source of that water would go directly into the lake.

Any construction on the north slopes is bound to have some effect on the wildlife. We seen that happen when Waldo Lake road was put in. Before the road was put in, we would see deer all the time around the lake. Now it is very seldom we see any. We saw what we believe was a Wolverine crossing the road a couple years ago.

We have heard Elk bugling along that east side. Will they disappear like the deer did? Will the lifts run in the summer time? Will we have to listen to that when we are on the lake or hear the engine running to power the lifts.

Gold Lake & the area around it is probably one of a kind in Oregon. It is peaceful & quiet, that

3

3.

why so many people visit the area every year. Once you lose some of that beautiful environment, you never get it back. It's gone forever. I am also against it because it goes into a roadless area and changes the Pacific crest trail.

Will this open the door for other ⁴ expansion into other roadless areas?

Any further development should be kept on the south side.

So I recommend Alternative II or II B. That would give a total of 30% increase which I think is very good.

Yours truly,

Curtis Seide
2545 Jackson St.
Eugene, Or. 97405

RESPONSE TO COMMENTS FROM CURTIS SEIDE

1. Refer to Appendix G pertaining to mitigation procedures for permanent roads.
Refer to Response to Comments from Oregon Department of Fish and Wildlife, number 6.
2. Thank you for the information concerning this stream. A Forest Service Biologist will investigate the location of this stream at the earliest opportunity. Depending on location and distance of the stream, all precautions will be taken for stream protection.
3. Lifts on the north side will not be operated in the summer except for maintenance activities. There will be no summer recreational use of the north side developments by the public.
Refer to Response to Comments from Oregon Department of Fish and Wildlife, number 4.
4. This will not "open the door for expansion into other roadless areas." Each area will be addressed on a site by site basis.

same way. Otherwise, the overdemand may destroy at least the out-of-state demand.

February 15, 1985

To: Mr. Michael Kerrick, Forest Supervisor
 Willamette National Forest
 P.O. Box 10607
 Eugene, OR 97440

From: Roger Senders
 423 South "C"
 Tacoma, WA 98405

Dear Mr. Kerrick,

As a native Oregonian, I am glad to see the expansion proposed for the north side of Willamette Pass. Growing up in Seattle and living here while going to law school has not lessened my love for Oregon. While I am a strong environmentalist and support the protection of our wilderness areas, I also believe that organized utilization of non-wilderness areas best protects other more fragile parts of the ecosystem. Because northside expansion would benefit the entire Willamette Pass community, I strongly support the proposed expansion of Willamette Pass.

Expansion would benefit skiers by increasing skiable terrain and decreasing congestion on the mountain. Prior to current management, little was available for skiers at Willamette Pass. I skied there once several years ago and decided I would not go back. While personnel was friendly, there was insufficient skiable terrain and inadequate grooming. As a lifelong skier, I value long and varying runs. Then, Willamette Pass had neither.

I was pleasantly surprised three years ago when some friends in Eugene told me that the Pass was under new management and had expanded. They invited me to visit and try the new Willamette Pass. I was impressed by the changes. The lift moved skiers quickly and opened up the mountain. The new runs added both skiable space and diversity of terrain. The slopes were very well groomed and the staff provided excellent service. I continued to be pleased and impressed with the quality of service and skiing at Willamette Pass over the next three years.

Others have noticed the improvements as well. The demand for the area has increased to the point of making skiing there an unpleasant experience. On my most recent visit three weeks ago, I included several friends from Seattle who were excited at the prospect of skiing at a new resort. While the staff was pleasant and the conditions perfect, the lines were so long that none of us enjoyed the day. We had to wait in lines of half an hour or more. My friends appreciated the mountain but vowed not to return unless more lifts were allowed, and more mountain opened to spread out the skiers and shorten the lift lines. None of us is willing to drive six hours to wait in long lift lines. I was amazed at how demand for Willamette Pass skiing had grown in three years. If Willamette Pass is expanded, my friends and I will continue to make the trip to ski there. I am sure there are others in Washington who feel the

The increased use of the area must surely be a boon for the merchants along the highway between Eugene and Bend. If even only one third of the people on the slope stop while going to or from the mountain, many thousand dollars must be spent daily. Multiplied by the days in the ski season, the economic impact for merchants along the route must be phenomenal. Opening up the north side of the Pass can only improve the business outlook.

I am told that some people are concerned that opening up the north side will scar the mountain and mar the view from Waldo Lake. After viewing Grouse Mountain from Vancouver, B.C. and Heavenly Valley from Lake Tahoe, I do not believe it. If done well, and I have no doubt that it would be, the noticeable portions of the new runs should have very little impact on the view. Based on the types of runs established on the rest of the mountain, narrow trails would be likely. To my eye, such trails are not disruptive of the grace and beauty of a mountain. Without question however, such development is significantly less impactful than the clearcutting that occurs close to the area.

As a skier and environmentalist, as a Washingtonian and Native Oregonian and as one concerned with the economy of Oregon, I urge you to allow the proposed expansion of Willamette Pass.

Sincerely,

Roger Senders
 Roger Senders

RESPONSE TO COMMENTS FROM ROGER SENDERS

1. This information has been included in the FEIS.

February 25, 1985

Michael Kerrick
Forest Supervisor
P.O. Box 10607
Eugene, OR 97440

RE: Proposed expansion of Willamette Pass Ski Area.

Dear Mr. Kerrick:

As Lane County residents and frequent users of the Willamette Pass Recreation Area, we would like to register our disapproval of the Willamette Pass Ski Corporation's expansion plan for the north side of Eagle Peak.

The area as it now exists represents a delicate balance; high density recreational use at the developed ski area and low density, dispersed recreational use of the surrounding area. Currently, alpine skiers, nordic skiers, and snow mobile users co-exist in a relatively small area with a minimum of conflict. The proposed expansion would degrade the whole area's recreational benefits year-round while providing additional benefits for only one user group, for only one season.

We have enjoyed and supported Willamette Pass Ski Area's improvements and expansions on the south side, however we feel that further expansion would be more of a detriment than a benefit.

Please... leave the north side of Eagle Peak untouched; the long-range benefits of leaving it a natural area are far greater than the short-term benefits of commercial gain.

Sincerely,
Laurel M. Schulz
Laurel M. Schulz
Brad C. Skelton

RESPONSE TO COMMENTS FROM LAUREL M. SCHULTZ AND BRAD C. SKELTON

1. Alternatives one through six encompass permit boundary areas ranging from 400 acres to 1100 acres (these figures include existing south side expansion). The permit boundary area is surrounded by a total of 137,320 acres of designated roadless and wilderness areas (1. Waldo Roadless Area = 60,720 acres; 2. Maiden Peak Roadless Area = 39,500 acres; and 3. Waldo Wilderness Area = 37,100 acres. Figures obtained from the Deschutes National Forest Land Management Plan). Given the figures above, alternatives one through six represent three tenths of one percent to eight tenths of one percent of the area. Based on this information, it is expected there will be a minimal impact on the "whole area's" recreational benefits.

1

2-28-85
80 sent - 1/24/85
" received 2/25/85

Mike Kerrick, Forest Supervisor
Willamette National Forest
P.O. Box 13687
Eugene, OR 97140

I am writing you this letter to support the planned
Willamette Pass expansion.

Both Lane County and Eugene would benefit because the new expanded ski resort would help in attracting outside business who have been considering a move to Eugene and Lane County. I need not impress upon you the vital importance this has in contributing to the general economic welfare of this area. This is probably more important in the long run than the immediate benefit to the tourist industry. (Just today, I met people on the lift who were from California and Portland)

I also understand that the planned expansion would increase the Nordic skiing capabilities. With such an encompassing proposal, all parties should welcome the expansion. Can anyone, who really appreciates being with nature, argue against this plan?

Being a concerned citizen and a businessman, it troubles me to see a small vocal group attempting to subvert the plan. I have tried to understand their points. Some are valid, but the major arguments against are so weak that I must point them out. Two major points come into immediate focus:

- 1) That the planned expansion would not be good business, and that the increased usage of Willamette pass is due to the stealing of customers away from Hoodoo Ski Bowl.
- 2) That wildlife would be affected in the nearby Waldo Wilderness Area.

To answer the first point, I am certain that the businessmen and investors know much more about marketing and return on investment than the critics (who are typically naive about business and free enterprise.) With respect to Hoo-doo, Eugene is not their only market. Hoo-doo is very close to both Salem and Albany. Yes, they may be losing business, but this is because their facilities are old and not up-to-date. The customer demands the highest quality and standards. The ski industry is growing and to stifle the inevitable would be disastrous for our community.

3-5-85 CC sent to Dade by
" " routed in S

To address the second issue, the opponents of the planned expansion do not have a convincing argument on this. Their logic is insinuating and without hard facts. It is full of words like "maybe" and "possibly" and "perhaps." Their final reasoning is to place the "rights" of the supposedly endangered wildlife (a contradiction in terms) above the non-arguable rights of the individuals who wish to exploit their property and to create wealth and enjoyment for many. But the worst and weakest argument is their reliance on the premise that maintaining the status-quo is "good for the public." Good for whom? And who is the public? Are we to succumb to "mob rule?" Until the opponents to the planned Willamette Pass expansion can come to grips with reality, their arguments don't hold any validity in this society.

Sincerely,

Bradley C. Stewart

965 Lewis #1
Eugene, OR 97402

RESPONSE TO COMMENTS FROM BRADLEY C. STEWART

1. See discussion on effects on Hoodoo and Mt. Bachelor Ski Areas in FEIS on page 57.

To: Michael Ferrick
Forest Supervisor
Willamette National Forest

From: John Talberth
1890 W15th St.
Eugene, Ore. 97402

Dear Mr. Ferrick,

As part of the research team at the University of Oregon that studied demand for overnight accommodations and general recreation demand in the Willamette Pass area, I have the following comments to offer concerning the proposed ski area expansion.

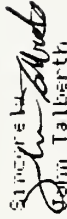
In no way did the information we gathered in our study implicate a pressing need for additional skiing facilities. The three resorts already operating within a short distance of Eugene are far more than necessary to accommodate existing and projected future demand when one looks at actual, not "desired" demand, and when one considers the full cost as an appropriate time period to measure demand, not just peak weekend use. In addition, the proposed improvements will draw more skiers from other resorts like Hoodoo. If this is the case, then there will be no net economic benefits resulting from the expansion.

In order to justify the destruction of old growth forest, the risk of polluting rare pure water, the loss of an endangered species' habitat, and the creation of an escarpment in a pristine landscape, the absolute necessity of the alteration would have to be proved without a doubt. Neither the Forest Service nor the Willamette Pass Ski Conformation has come close to demonstrating this for obvious reasons. People don't need downhill skiing, it is at best a sporting pleasure and is one that is not affordable to a large segment of the population anyhow. Most skiers go maybe four or five times a winter and surely do not desire additional facilities to the point that would justify expansion. Wildlife such as the wolverine need the land in question for mere survival. Why should the "need" of a handful of regular skiers for better snow and more challenging slopes weigh more heavily than the need of a species faced with possible extinction?

The proposed expansion of Willamette Pass exemplifies the mindset which sees our natural areas as targets for economic exploitation. The roadless wilderness which would be affected has a value far beyond what can be reduced to dollars. With the rapid depletion of wilderness and wildlife worldwide one would expect responsible decision makers to search for alternatives that would insure preservation of these valuable resources and, at the same time, enhance human experience of the natural wonders such areas have to offer. We already have examples of such alternatives in Oregon. Resorts such as Bratenburgh offer unique opportunities to study and learn from the complex ecosystems of old growth forests. I firmly believe the future of the Oregon economy lies in promoting experiences such as these for a nation suffering from severe pollution and urban disasters. Ironically, 6,000 acres around Bratenburgh are scheduled to be clear cut. We shouldn't let this happen there nor should we permit intrusion on any roadless or little cut areas remaining, this would rob ourselves of a prosperous,

environmentally sustainable future.

With these thoughts in mind I urge you to consider the vast opportunities available to this state in creative management of its natural resources and prohibit any expansion of the ski resort at Willamette Pass. Why risk a future that may involve replenishing the land with its natural wildlife for all to study and experience on the words of a corporation attempting to expand its share of the market. Listen to the wisdom of those who instead, love the wilderness for the lessons it teaches and the values it instills. Protect our remaining untouched forests for the benefit of wildlife, for those who know of its wonders, and for those who have yet to discover!

Sincerely,

John Talberth
1890 W15th St.
Eugene, Ore. 97402

CC: Register Guard
What's Happening
Oregonian

RESPONSE TO COMMENTS FROM JOHN TALBERT

1. The expansion of Willamette Pass Ski Area will occur over ten to fifteen years. Although it may be more appropriate to measure demand over a full week, in actuality, much heavier use occurs on the weekends. Several individuals supported expansion as a way to reduce long lift lines. Willamette Pass Ski Corporation considers providing short lift lines part of their overall service. Recreation facilities (stadiums, movie theatres, ski area, etc.) are designed for peak use. Being able to accommodate skiers on peak weekends and holidays is critical for making any ski operation economically viable.

See discussion on effects on Bachelor and Hoodoo Ski Areas, page 57.

2011 Elk Drive
Eugene, OR 97403
February 22, 1985

Mr. Michael A. Kerrick
Supervisor, Willamette National Forest
P. O. box 10607
Eugene, OR 97410

Dear Mr. Kerrick:

This letter represents my comments on the Willamette Pass Alpine Winter Sports Site Draft Environmental Impact Statement. First I should say a few words about myself. I am a partly retired professor of Biology (a botanist) at the University of Oregon. My wife and I came here in 1955 and immediately began using the Willamette Pass area for downhill skiing with our four young sons, all of whom learned the sport there. Two of them served on the ski patrol and then as instructors in their teen-age years. Our family literally grew up with the area. Since my own skiing background extends back into the 1930s, when all skiing was really touring, with the first tows invented as a means to practice turns for use in touring, the advent of modern nordic equipment encouraged all of us to follow the cross-country route. However, I am still also an active downhill skier. Through all of our years here, we toured many of the same trails now used by the "nordics" on our old-style downhill skis equipped with "touring attachments."

I have been a member of the Sierra Club and other conservation organizations since the time of my service in the Tenth Mountain Division of the U.S. Army during the Second World War. I have been an active participant in disputes with the Forest Service regarding the establishment of Wilderness Areas, particularly those on your forest. I have served as an officer of the old Pacific Northwest Chapter of the Sierra Club and as its Chairman. Since 1979 I have been on the national Board of Directors of the Club and at the present time serve as national secretary.

Now that I have established my credentials to speak, I will make my comments. Unlike many others with whom I have been associated in the environmental movement, I am something of a pragmatist and in any case never on the radical fringe. I found your draft EIS to be moderate in tone, with the alternatives very well thought out. In fact, your Alternative IV is enormously better than the corporation's preference, Alternative V in reducing the visual impact and other impacts of the proposed development on the de facto wilderness that surrounds it on three sides. However, Alternative IV is sufficiently damaging to the area for me to look for other alternatives. I doubt seriously the ability of this ski area to attract a clientele from outside the state, and also feel that few will come from the Portland area, no matter how many lifts and lodges are built. To approve an expansion plan that involves the construction of three lifts gives encouragement to the owners to over develop, which could lead to bankruptcy later on. I would like to propose that at this time you approve Alternative III, which allows expansion of the area to the north side, thus opening up much better snow and a longer season to local skiers. At the same time you could say that if at a future time there appears to be a need for further expansion, the matter could be reopened, with further hearings and opinions, and that further expansion might be approved at that time. Alternative III intrudes on the de facto wilderness very little, and does not require construction of a major road. The short spur shown on your map would be no more objectionable than the existing work road to the top of Eagle Peak. There would appear to be virtually no visual impact from

S. S. Tepfer Comments on Willamette Pass Draft EIS, Page 2
the west or north. I consider the relocation of the Pacific Crest Trail to be an improvement over the present route of the trail.

Next I would like to comment on the present Alternative IV, realizing that in the end you may proceed with this Alternative in spite of my preferences. Lift E would have more visual impact than Lift D, but I recognize that eventually it may be justifiable. Lift G, which I understand is the "invention" of your staff, is an ingenious improvement over Lift F of Alternative V. The problem with this alternative that disturbs me the most is the construction of a lodge at or near the top of West Peak. I feel that such a lodge is not in the spirit of Oregon downhill skiing, and is not needed, neither now nor at any time in the foreseeable future. As long as Lift G is constructed at the same time or before Lift E, there is adequate access to the existing very fine hodge on the highway. The second objection to this alternative is the need to construct such a long road. I can imagine the need for a primitive road, later to be a ski trail, but fear that it would be built at an unnecessarily high standard, even if not open to the public. I fail to understand why chair lifts require a service road other than for supply of fuel. Is there any good reason why any northside lifts (be it D, E, or F), could not be electrically operated? If the problem is the unreliability of the area's public power supply, then why not a diesel generator at the home base, with underground power lines to serve the northside chairs?

Lifelines D and E would not be extremely intrusive and I trust the Forest Service to insist that the downhill runs be designed so that they are generally invisible from afar. I personally would support Lift E if the road and restaurant are eliminated.

In summary, I support Alternative III in all details. I could support an alternative intermediate between III and IV that would include the lifts if they are electrically operated, but with no summit lodge or service road. A catclline trail need not be a road. Please note that the Bachelor ski area, after insisting that they needed a summit lodge, are getting along very well without one.

In closing I must emphasize that this is my own statement and does not represent any position of the Sierra Club, either at the local or national level. The Club, nationally, prefers the expansion of existing areas over the establishment of new ones, but only if there is no intrusion on wilderness, and this does intrude on de facto wilderness.

While the intrusion here is not into a dedicated Wilderness Area, we have not given up on pushing for establishment of more official Wilderness on the Willamette and Deschutes Forests, and the Maiden Peak area is a prime candidate. If I were in your position, I would not be in any hurry to put roads into the area. I appreciate the work that your staff has done on this project. I do support some expansion of the area to the north side and hope that this can be accomplished with a spirit of compromise.

I would like to meet with you and to discuss this further if you can find the time.

Sincerely yours,

Sanford S. Tepfer 1.16
Sanford S. Tepfer
343-7178 (home)
686-4500 (office)

RESPONSE TO COMMENTS FROM SANFORD S. TEPFER

1. Agreed. The primary market area for the Willamette Pass Ski Area is Eugene-Springfield which accounts for approximately 80% of the area's skier visits.
2. The lifts are approved in concept. The expansion will be built in phases, beginning with the design and construction of chairlift D and a catchline road. The road will be built to minimum standards (roughly 12 feet wide with a 20 foot clearing); it will serve the following purposes: remove timber; construct and service lifts; provide a safety catchline and serve as a groomed nordic tract during the winter season. The road surface and cleared right-of-way will be seeded to reduce visual impacts.

Prior to construction of additional phases, the permittee must demonstrate a market need for more facilities, economic feasibility and ability to finance and operate new facilities.
3. Agreed.
4. Chairlift G was proposed as an alternative to upgrading the existing summit chairlift (A) from a double to a triple chair in the Master Plan. The planning team proposed keeping chairlift G for alternate access to the north slopes in case the summit chair broke down.
5. The Summit Lodge is approved in concept. The permittee will be required to demonstrate public need, economic feasibility and environmental suitability of the lodge, as part of the environmental analysis. The public will have an opportunity to provide input at that time. It is conceivable that the lodge will not be built.
6. The cost of removing timber by helicopter (around Eagle and West Peak) is prohibitive without a catchline road. The road will serve several additional purposes as outlined in response number 2 above.

The chairlifts will require fuel storage, but access will be from the south side. Electric lifts with diesel backed secondary generators are feasible, but installation will depend on cost (See discussion in section on Water Resources in Chapter on Environmental Consequences, pages 32 and 33).

Eugene Hospital & Clinic

PHYSICIANS AND SURGEONS
1182 WILLAMETTE STREET
EUGENE, OREGON 97401
TELEPHONE 503-687-6000

CLINICAL LABORATORY

DIAGNOSTICS

PHYSICIAN

INTERNAL MEDICINE

Cardiology

Endocrinology

Neurology

Obstetrics & Gynecology

Orthopedics

Pathology

Pharmacology

Physiology

Psychiatry

Radiology

Respiratory

Surgery

Urology

Veterinary

X-ray

Yeast

Zoonoses

Antibiotics

Chemistry

Clinical Microbiology

Immunology

Microbiology

Nephrology

Oncology

Optometry

Otolaryngology

Podiatry

Preventive Medicine

Public Health

Rehabilitation

Statistics

Therapeutics

Eugene, 1-29-85

Re: Willamette Pass Skiing Project

Dear Mr. Kendrick,

I oppose the planned expansion of the Ski area to the roadless north slopes of Eagle Peak. I have attended the informational meeting at the Valley River Inn, studied the Draft Environmental Statement and your comment in the R.G.

Weighing all arguments I have come to the conclusion that the expansion would be in many respects detrimental to the area. It does not fulfill urgent needs of the local population, since the ski area's growth has siphoned off customers from Hoodoo and adds to the hazards of road travel over the pass. I resent the sacrifice of precious public natural resources for the purpose of competitive struggle between private concerns without real benefit to the public.

I could support your alternatives II or a modified VI (2 new south side lifts without north side expansion)

Sincerely

Hon. W. Tschernich, D.D.

C.C. Hon. James Weaver

Hon. Earl Hershbach

David Stone, ONRC

Senator Marge Hendrickson

RESPONSE TO COMMENTS FROM HANS U. TSCHERSICH

1. Refer to Environmental Consequences section on the effects on Hoodoo and Mt. Bachelor Ski Areas, page 57.
Agreed, increase traffic will add to hazards of road travel over the pass.

March 2, 1985

Mike Herrick
Forest Supervisor
Willamette National Forest
211 E. 7th Ave.
Eugene, Oregon 97400

Dear Mr. Herrick:

This letter is in response to your draft Environmental Impact Statement on the proposed Willamette Pass Ski Area expansion. Most of the concerns expressed in my letter of October 4, 1984 remain unchanged and many were inadequately addressed in the draft EIS. For purposes of clarity, in this letter I will also restate some of the points made in that letter.

In the last 19 years there have been approximately 60 sightings of wolverine animals or tracks in Oregon. Five of these sightings have been within a seven mile radius of the Willamette Pass Ski Area. Four of those five have been within the last five years. This represents the highest concentration of sightings for any given area, and for any given area per unit of time in the entire state of Oregon. This suggests that the richest probability of a viable (reproductively active) population is centered in the immediate vicinity of the proposed ski area expansion.

As was stated in your draft EIS, the effect of ski areas on wolverines is not known. However, of the 60 Oregon sightings, four were reported in the vicinity of Mt. Hood in the late 1960's and early 1970's. No sightings have been reported for this area in the last twelve years. The most significant change that could account for the recent lack of sightings seems to have been increased recreational use. The statement was made that "Substantial documentation also exists to indicate that the animal can adapt to human intrusion by raiding unattended dwellings and traplines for food" (p 28). On the other hand, it was also stated (p 51) that the expansion would be likely to decrease trapping in the area. In addition, it seems unlikely that this behavior would be a means of adapting to human intrusion. It is more likely that this behavior (part of their natural investigative and food seeking behavior) would be exhibited only if the level and type of intrusion were below their limit of tolerance.

Habitat and prey base in the Oregon Cascades is entirely different from that of Montana. Therefore, much skepticism

should be placed on the application of range data from Dr. Hornocker's study in Montana to our situation in Oregon. Your calculation of 5% of habitat affected (p 105) is probably inaccurate. In addition, all animals use different parts of their range to varying degrees so it is unfair to assume that this is a small percentage.

It is suggested that the recent designation of the Waldo Wilderness Area "could be weighed against the possible losses in the ski area expansion" (pp 48-49). Timber harvest has been precluded in this area. Unlike clearcutting, where the trees will eventually grow back, the expansion of the Willamette Pass Ski Area will have a permanent and irreversible effect on the environment.

Since virtually nothing is known about wolverines in Oregon, a responsible management decision concerning the area in Oregon with the highest probability of a viable wolverine population cannot be made. The Oregonian (January 2, 1985), in relating your comments when the draft EIS was first published, stated: "He said some additional work on wolverine habitats remains to be done." However, the draft EIS states that a "rational decision could probably be made based on current knowledge" (p 105). As I stated in my previous letter, it would be most advantageous if the decision on the proposed expansion could be postponed until the completion or near completion of my study. I merely suggest that before undertaking a project that will permanently alter this habitat, more time should be taken so that more research may be done, so that a better informed decision might be reached. This study will provide you with few absolutes (p 105) but at present you have no knowledge of wolverine habitat and distribution in Oregon. What my study will provide you with is some knowledge.

Sincerely,

Donald R. Utzinger
Donald R. Utzinger
Biology Graduate Student PSU
P.O. Box 154
Brightwood, Oregon 97011

RESPONSE TO COMMENTS FROM DONALD R. UTZINGER

1. This could also suggest that the Willamette Pass area is more easily accessed during the winter than, for example, the Three Sisters Wilderness. Many of the track locations of wolverines are found on the Waldo Lake Road, which is utilized heavily by snowmobilers. Consequently, many other locations in the Cascades may support wolverines, but are not as easily monitored.
2. We have no information regarding wolverines in the Mount Hood area. We agree that wolverine use of the expansion area would be dependent on their limit of tolerance to human intrusion. We would note on the basis of a telephone conversation with Dr. Maurice Hornocker (3-29-85) that the likelihood of impacts to wolverine use of Gold Lake would be very slight, and that the overall impact of the expansion would be negligible.
3. The calculation of 5% of habitat affected was presented as an estimate, and was never intended to represent a precise figure. Actually, it's just as likely that we made an error in favor of the wolverine as otherwise.
4. We agree that animals use parts of their range to varying degrees (See Waldo Wilderness Council, Response number 100).
5. See response to comment 2. Dr. Hornocker indicates that in his opinion, wolverines will successfully adjust their home ranges, and that the expansion should have minimal impact.
6. We agree that there will likely be some impact on the wolverine and this is noted in the FEIS, page 37, the risk analysis and the Wildlife Assessment (See Appendix C). However, our evaluation of the literature, backed up by Dr. Hornocker's opinion (Hornocker, Personal Communication) leads us to believe that the decision to approve Alternative IV was rational, based on available information.

2555 NW Savier #13
Portland, Oregon 97210
February 25, 1985

Michael Kerrick, Forest Supervisor
Willamette National Forest
P.O. Box 10607
Eugene, Oregon 97440

Dear Michael Kerrick:

I have recently read your EIS and I am in strong support of Alternative 2. I have hiked and skied in the Willamette Pass area for a number of years and Alternative #4 is a scandal. It would totally ruin the wilderness and aesthetic values of the area. Maiden Peak, Waldo Lake, and Charlton Butte would have lost many of their pristine values. The Waldo area, Maiden Peak, and Charlton area would all lose vital habitat of old growth species such as the wolverine, the cougar, marten, and the fisher, under Alternative 4.

Alternative 2 does not require relocation of the Pacific Crest Trail. I can't believe that the Pass won't run into major financial difficulties under Alternative 4. They have put in snow making machines and a huge lodge in the last couple of years. Where are they going to get the money for such a huge undertaking? It looks to me they are pushing for all the new development so they can sell out. I FEEL THIS IS EXTREMELY INAPPROPRIATE USE OF FOREST SERVICE LAND. It is for the use and enjoyment of everyone not for the profit of a very few. We need to conserve our precious resources not destroy them.

Please do all in your power to stop this destruction of critical habitat. ALTERNATIVE 2 is the only REASONABLE ALTERNATIVE.

Sincerely,

Glenn Van Cise

Glenn Van Cise

3-1-85 cc: Port to La Barge
3-1-85 cc: Henders in SD

RESPONSE TO COMMENTS FROM GLENN VAN CISE

1. Refer to Appendix C and Response to Comments from Waldo Wilderness Council, numbers 13, 14, 52, 53, 99, 100, 101, 102, 105, and 108 regarding wolverine, cougar, marten and fisher.
2. The permittee will be required to demonstrate a market need for additional phases of development as well as evidence of economic feasibility and cash or assets to finance and operate development.

February 12, 1985

Willamette National Forest
P O Box 10607
Eugene, Oregon 97440

Subject: Proposed Willamette Pass Ski Area Expansion
To whom it may concern:

I am a skier and have been since the early 1950s. In fact my wife and I started at the Willamette Pass Area when it had only a rope tow for an uphill conveyance and there were lots of trees still standing in the middle of the slope. Its proximity to the Willamette Valley has always been a plus factor, and it is gratifying to see the many improvements being made by the present owners. There have been a number of failures in the past.

As a member of the National Ski Patrol I have spent many hours at the area, and it gave me an opportunity to be on the back side of the mountain in the proposed development area. I am in favor of the proposed development. There are definite advantages for the skiing public in such a development, quality of snow, length of season to name a couple. But, because the National Forest is used by not only downhill skier types but cross country skiers, snow mobilizers, back packers etc., everyone, including the Environmental groups must take a look at both sides of the issue and ask themselves is this development, if authorized or not authorized, is the best for all. A benefit for many or a few.

My only concern at this time is the possibility of the creation of a service road into the proposed lift area. If I am not mistaken, when a road is opened in public land it must be left open to the public for their use. This could open up a whole new "bag" so to speak and may prove to be quite detrimental to the area in the future. But on the other hand, maybe it is impossible to service the lifts from the present facility. This would have to be addressed by the present Corporation.

My reason for bringing up this concern is the recognition of the statements of the Environmental groups as to the number of wild animals which use the area. I am not an Elk hunter but I know that a large herd use the area for their winter home, and, although Elk are quite flexible and when someone encroaches on their area they just pack up and move further away, this is why I say it brings up a reason to look at all sides.

I for one, look forward to further development of the area. As for the argument that the lift could be seen from Waldo Lake, the impact of that is strictly in the eye of the beholder.

Cordially,
Donald D. Wiltse
Donald D. Wiltse
4491 Doyle St.
Eugene, Oregon 97404



RESPONSE TO COMMENTS FROM DONALD D. WILTSE

1. Refer to Response to Comments from Waldo Wilderness Council, number 5.
2. The area is used in the summer by elk.
Refer to Response to Comments from Izaak Walton League of America, Inc., numbers 3 and 4.

February 27, 1985

Dear Mr. Lomick,

I have completed a review of the Willamette Pass DEIS and have the following comments:

- 1) The proper place to address changes in use for the roadless area on the north side of Goble Peak is in the forest plan. The plan is only six months away from a review draft being distributed. To make a decision now to develop those lands will preclude making any choices for that area in the plan.

- 2) Of the alternatives presented Alternative II appears to be the most rational choice. It allows for a significant increase in skid usage without the detrimental environmental impacts of the preferred alternative. Alternative II also maintains the roadless character of the area on the north side of Goble Peak, so that it may be addressed in the upcoming forest plan.

- 3) The presentation of the DEIS was obviously rushed to satisfy your desire to have it out for review during the skiing season. Overall it is difficult to read, lacks adequate documentation, lacks sufficient detailed analysis and is filled with typographic errors. I feel the USFS should be able to produce a more professional document. The public needs and deserves a better document to review potential environmental impacts and to make informed comments.

3-4-85 CC sent to bridge
"routed in 70."

Comments to Willamette Pass
DEIS.

- 2 -

- 4) I feel that the USFS has a responsibility to protect habitat for threatened and endangered species regardless of whether they are federally or state listed. The current political climate in Washington D.C. is to discourage additions to the existing federal list. Many feel that the current status of the wilderness is that it should be listed, but that current politics preclude its addition. The federal government controls over 52% of Oregon's land base and they must have responsibility, whether legal or moral, for threatened and endangered species whether federal or state listed.

- 5) In the demand analysis it appears that increased skid use at Willamette Pass corresponds to a reduction in use at Hoodoo. This appears to me to be a transfer of demand to a "new" site area. I question whether there is really a need for more facilities if the demand for skiing is just transferred from one place to another. I also did not see the reduction of use at Hoodoo skid area listed as lost income in the economic analysis. No attempt was made to put a value on lost recreation by back-country skiers, hunters, fishermen and other users of the area. Also no values were given to losses of wildlife habitat or wildlife. In short the economic analysis appears to have been written to paint a positive picture of the project and to ignore the potential negative economic impact.

6) The risk analysis for wildness seems to have a fatal flaw. Impacts in a local area when compared to a large enough area, like the state of Oregon, will always be minimal unless the animals are far ranging migratory animals such as caribou. This sort of analysis will always minimize local impacts and will always justify taking habitat to small bits. This sort of analysis could go on indefinitely without this sort of risk analysis ever identifying any detrimental impacts.

7) There are no reasons given for the choosing of the preferred alternative. The DEIS gives a survey of information on wildlife, environmental and economic effects that quite often show other alternatives to be the rational choice. From this document it would be difficult to defend the choice of the preferred alternative. My conclusion after reading the evaluations presented in the DEIS is that Alternative II offers the

most reasonable compromise.

8) When a proposal has the potential for destruction of wildlands it is developer should be required to post a restoration bond. This bond would cover the cost of restoring the land to its pre-development state should the permittee violate the terms of the permit or have financial problems and close down. With the constant turnover in Cascade the areas and potential for poor snow years in the Willamette Pass area makes this

5

6

7

8. cont.) a reasonable proposal. There is no reason why this area must be turned to other uses if someone isn't making enough money to keep going, after all this is public land.

9) The justification for the summit lodge of a view of Diamond Peak is weak at best. Are there no available views of the peak? I think you will find that there are several scenic views of Diamond Peak from Highway 58. When coupled with the year round impacts to big game use in the area there seems to be no legitimate reason to allow the building of this lodge. I don't understand how the proposed alternative could include it.

Sincerely,

Jeff Zabel

c: Jim Weaver

RESPONSE TO COMMENTS FROM JEFF ZAKEL

1. A project-specific environmental impact statement is deemed to be a better forum than the Forest Plan for the determination of site-specific environmental effects on and around the project area. The responsible official has the option to delay making a final decision until the new Forest Plans are completed. This is essentially the No Change - Phase I Only Alternative (I). The Record of Decision clearly lays out the rationale for the decision.

The only lands affected will be those lands included in the 1100 acre project area.

2. Alternative I would cause the least disruption to the natural environment. Alternative VI would provide maximum utilization of the recreation resource opportunities and increased economic benefit to the area. Alternative IV provides a balance of concern for the physical and biological components of the human environment in addition to concerns for social and economic welfare.

Refer to response number 1 above.

Also see Response to Comments from Waldo Wilderness Council, number 6.

3. We agree that the U.S.F.S. has a responsibility to protect habitat for threatened and endangered species.

Refer to Response to Comments from Waldo Wilderness Council, number 102.

4. See section entitled Effects on Hoodoo and Mt. Bachelor Ski Areas (page 57) and Public Demand for Skiing at Willamette Pass (page 58). No major reductions in skier visits at Hoodoo are anticipated; no lost income to local, state, or federal treasuries is expected. The number of hunting, fishing, and recreation visitor days are expected to remain constant. See discussion of effects on wildlife (pages 36-39), fisheries (page 41), and recreation (pages 41-44).

See Response to Comments from Waldo Wilderness Council, number 78.

RESPONSE TO COMMENTS FROM JEFF ZAKEL, CONT.

5. Refer to Response to Comments from Waldo Wilderness Council, number 98.
6. The purpose of the document is to display information. Rationale for the decision is included in the Record of Decision.
7. Refer to Response to Comments from Waldo Wilderness Council, number 116.
8. Refer to Response to Comments from Waldo Wilderness Council, number 57.

IX. INDEX

Air Pollution	15
Air Quality	iv, 6, 15, 28
Alternatives	iii, iv, 4-5, 7-9, 11-13
Avalanche Hazard	6,17,28
Big Game	18,36,40,91
Break-Even Analysis	viii, 60, 60a, 60b, 107, 109
Capacity	5, 7-9, 12, 13
Communities	vii, 27, 52
Crescent Lake Junction	27, 52, 53
Cultural Resources	6, 25, 26, 49
Deer	v, 4c, 6, 11, 18, 36, 38a, 40, 91
Demand, Public	vii, 58-60, 60b, 101, 102, 104
Diamond Peak	15, 19, 43, 44
Diesel Spills	v, 33, 34, 34a
Douglas Horse Pasture	18, 37, 38a, 46
Eagle Peak	8, 9, 11, 15, 17, 19, 28, 44
Economics	vii, 3, 4f, 11, 53, 55, 60, 107
Elk	v, 4c, 6, 11, 18, 36, 38a, 40, 91
Employment	53, 53a, 61
Facilities	5, 7-9, 12, 13, 29a, 42a
Fire	18, 35
Fisher	v, 4c, 19, 38, 92, 94
Fisheries.	20, 41
Gold Lake Bog	18, 21, 34, 35, 37, 41
Gold Lake	8, 18-20, 22, 24, 39, 50a
Issues and Concerns	2

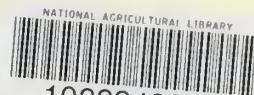
IX. INDEX

Location	15
Maiden Peak	4, 8, 22, 23, 45, 50a
Marten	vi, 4c, 9, 11, 19, 39, 40, 92, 95
Master Plan	1, 2
Minerals	17
Mitigation Measures	6-8, 10, 12, 14, 28, 29, 34, 39, 41, 46, 49, 51, 52, 55, 61, 92
Noise	9, 11, 13, 26, 49
Odell Lake	18, 20, 22, 50a
Overnight Accommodations	11a, 12-14, 31, 35, 44, 53-55
Pac. Crest Natl Scenic Trail	8, 9, 24, 42c, 45-48
Povey, Dr. David	54, 60, 66, 101
Public Input	3, 87-90, 120-123, 129-301
Public meetings	2, 4
Recreation Opportunity Spect	24, 44, 44a, 47, 48
Recreation	vi, 2, 6, 9, 11, 13, 14, 22, 23, 41, 42, 44, 46, 47
Research Natural Area	18, 21, 34, 41
Return to U.S. Treasury	viii, 56, 57, 57a
Rosary Lake	20, 24
Sensitive Plants	21, 41, 110, 113, 116, 117
Sewage	v, 11, 13, 14, 32-34
Skiing, Alpine	23, 47, 48, 58, 60a, 60b, 101, 104
Skiing, Cross-country	23, 24, 42b, 43, 45, 47, 48
Skyline Creek	v, 18, 20, 21, 32, 34, 34a, 35
Sleepy Hollow Creek	iv, v, 18, 32
Snowfall	16, 42

IX. INDEX

Snowmaking	16, 17
Snowplay	23, 24, 45
Soils	iv, 6-8, 10, 12, 14, 17, 18, 29, 29a, 29b, 30
Spills	9, 10, 12, 14, 33, 34a
Spotted Owls	20, 39
Summit Lodge	10, 11, 11a, 12, 14, 36, 38, 39, 42a, 42b, 43
Threatened and Endangered. Animals	20, 39, 95
Vegetation	9, 11, 13, 20, 21, 41, 41a
Visual Resources	vi, vii, 3, 6, 9, 11, 13, 14, 26, 50, 50a
Waldo Lake Wilderness	22, 44
Waldo Lake	vii, 20, 22, 50a
Water	2, 6, 8, 10, 12, 14, 18, 32, 34, 35
Wildlife	v, 2, 6, 9, 11, 13, 18, 36
Wolverine	v, 19, 37, 38, 38a, 40, 92-94, 97-100

DISCARDED
PSW LIBRARY



1022348862

DISCARDED
PSW LIBRARY

*

NATIONAL AGRICULTURAL LIBRARY



1022348862